BUSA 3116 – Fall 2023

Instructor Information

- o Professor: Johnny Ho, Ph.D.
- o Office: CCT 343
- o Office Phone: 706-507-8087
- o Office Hours: MW: 1:15pm—1:30pm, 2:45pm—4:30pm and by appointment
- o E-mail: ho_johnny@columbusstate.edu

Course Information

Course Name: BUSA 3116 Managerial Decision Making (3 credit hours).

Catalog Description: BUSA 3116 covers topics related to managerial decision analysis, including probability distributions, decision analysis, forecasting, inventory control models, linear programming, transportation and assignment models, project scheduling, and queuing/waiting line analysis.

Detailed Description: This course is intended to expose students to a wide variety of problem descriptions and methods of analyses. The goal is to acquaint students with quantitative tools frequently used in business settings. For example, decision theory models and decision trees will prove useful for business situations with numerous alternative decisions, each having a probability and monetary value associated with the outcome. Through forecasting students will be able to make projections regarding the future sales of goods and/or the future utilization of services. Inventory control tools will assist students in determining the most cost effective method of meeting demand and minimizing shortages; whereas linear programming will allow students to determine how much of various products/ service to produce given limited resources. Project management techniques demonstrate project flow, expected completion time and total costs. Queuing theory will demonstrate how to reduce wait times, anticipate customer flow, and staff accordingly. In addition, the course will stress the use of computer software to analyze and solve related problems on a microcomputer.

Prerequisites: BUSA 3115 with a grade of D or better.

Drop date with a WP: September 29, 2023.

Required Textbook

Quantitative Analysis for Management by Render, Stair, Hanna, & Hale, 13e, Pearson. 978013-4543161.

Recommended Materials

Selected Practice Problems Solutions and PowerPoint slides available for download via D2L.

Course Learning Outcomes

Students who successfully complete the course will be able to: (1) develop mathematical models for business problems; (2) apply appropriate quantitative techniques to solve business problems; (3) use IT tools for problem solving; and (4) evaluate and interpret solutions.

Turner College of Business Mission & Program Learning Goals

Vision 2025: We will be recognized as a leader in innovative business and technology education.

Turner College of Business Mission - We create better futures for our diverse student body by producing a career-ready workforce. Our programs are in business and technology – and where the two meet.

Program-level assessment has become an important component of assuring program quality and in maintaining professional accreditations with organizations such as AACSB, International (AACSB), and the Southern Association of Colleges and Schools (SACS). Some of the assignments in this course may be used to assess student learning at the program level. When a course assignment is used in this manner, the college will follow Federal guidelines to protect the confidentiality of student information.

Program Learning Goals

- o demonstrate proficiency in problem-solving and decision-making in a business context.
- o demonstrate knowledge of key business disciplines and concepts.
- o recognize and analyze ethical issues in a business context.
- o demonstrate knowledge of global business concepts and cultural diversity in a business context.
- o communicate effectively in a business context.
- o demonstrate proficiency using information technology in a business context.

Course Assessment

Learning Activities and Exams

Exams: There will be two midterm exams and a final exam. The exams consist of multiple-choice questions and problems. ***All exams require the use of LockDown Browser & Respondus Monitor (cost: $15).*** LockDown Browser & Respondus Monitor is a remote proctoring service that allows you to take your exams from anywhere *using a webcam, a microphone, and an internet connection*. ***All missed exams will be given a score of zero***.

Homework assignments: There will be a total of 3 homework assignments (i.e., HW 1, HW 2, and HW 3). The assignments (click Assessment > Assignments on the navbar in CougarView) will be available two weeks before they are due. ***Late homework assignments will not be accepted and be given a score of zero.***

Participation via Discussion Boards: There will be a total of 6 discussion boards (one per module). Your participation grade is based on the (1) *frequency (# of posts)*, (2) *quality/variety*, and (3) *accuracy*/correctness of your posts. For more details, please refer to the **Online Discussion Rubric** (click Communications > Discussions > Module *X* Discussion > Online Discussion Rubric). ***Late postings will not be accepted***.

Messages could be about, but not limited to: (a) answering an end-of-chapter discussion question; (b) solving an end-of-chapter problem; (c) discussing a possible application of quantitative techniques; (d) finding a typo/error in the textbook; (e) explaining an important concept covered in the course; and (f) sharing anything that contributes to the class. When posting to the class discussion boards, please use appropriate *netiquette* − *Do not say online what you would not say offline*.

Please do not post your questions to a discussion board, but rather send them to me via email.

Grading

Learning Activities and Exams	Weight
Exam 1	27%
Exam 2	27%
Final Exam	34%
Homework Assignments (3% each)	9%
Participation (0.5% each)	3%
Total	100%

Course and Institutional Policies

Online Proctoring – Respondus Lockdown Browser and Respondus Monitor

To maintain academic integrity, this course utilizes Respondus Lockdown Browser and Respondus Monitor for the proctoring of online exams. *Students will have unlimited use of Respondus Monitor for a one-time charge of $15 for the academic year*. Students will be prompted for payment directly in CougarView when the first exam is accessed. Respondus LockDown Browser is a custom browser that restricts the testing environment within CougarVIEW and replaces regular browsers such as Chrome, Firefox, and Safari. Respondus Monitor requires you to have a webcam and audio as it will record you while taking your assessment. Students are required to download the Respondus Lockdown Browser to a laptop or other computer device with an operating system (not a phone or cloud-based system) to take course exams. Students agree that they may be recorded by the software during the exam session and that the course instructors or other appropriate individuals at Columbus State University may have access to and may review such recording. Students further understand that if the results of a review support an allegation of academic dishonesty, the course work in question, as well as any supporting materials, may be submitted for investigation and further action. All videos recorded by Respondus Monitor and LockDown Browser are confidential and considered educational records under FERPA. Click on the following link to the Proctoring Center where you can find additional information: https://testing.columbusstate.edu/proctor/ **IMPORTANT: Chromebooks, iPads/tablets, Android devices, and smartphones are not compatible with LockDown Browser and Respondus Monitor.**

Late Work Policy

Late homework assignments, exams, and postings will **not** be accepted.

Graded Work

1. Deadlines will not be extended for any circumstance other than technology issues that affect **all** students equally.
2. Unless other factors enter in, my goal is to have all grades posted within 72 hours of the deadline for submission.

Communication

You are highly encouraged to communicate with me on a regular basis and can contact me via:

- **Email**: You are welcome to use your CSU email account to email me at ho_johnny@columbusstate.edu. Alternatively, use the email link in your CougarVIEW (D2L) account to send me email messages. You will also receive emails from me in your CougarVIEW Account. Please check it daily by clicking on the email link.

- **Phone:** I can be reached at 706-507-8087. Please leave a short message in my voicemail if I am out of the office.

- **In Person**: See page 1 for my office hours.

My goal is to answer your email questions within 24 hours during weekdays and within 48 hours during weekends.

ADA and 504 Statement

Columbus State University provides reasonable accommodations for all qualified persons under the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504. You may be eligible to receive accommodations to assist in programmatic and/or physical accessibility. We recommend that you contact the Center for Accommodation and Access located in Schuster Student Success Center, Room 102, 706-507-8755 as soon as possible if you think you are eligible for accommodations. The Center for Accommodation and Access can assist you in formulating a reasonable accommodation plan, in identifying additional resources, and in providing support. Accommodations may be able to assist you to meet the requirements. Technical support may also be available to meet your specific need. Please contact Sarah Secoy if you have questions. She can be reached at 706-507-8755 or at caa@columbusstate.edu.

Title IX Discrimination

Under Title IX of the Education Amendments of 1972, harassment based on sex, including non-consensual sexual contact, non-consensual sexual penetration, stalking, domestic and dating violence, and harassment or discrimination because of pregnancy or related conditions, is prohibited. If a student would like to file a complaint for Title IX discrimination or has any questions, please contact the CSU Title IX Coordinator (Sarah Secoy, 4225 University Avenue, Schuster 110, Columbus, GA 31907, secoy_sarah@columbusstate.edu, 706.507.8757), Deputy Title IX Coordinator (Craig Burgess, Richards 205, 706-507-8234, burgess_craig@columbusstate.edu), and/or the Office of Civil Rights (Atlanta Office, U.S. Department of Education, 61 Forsyth Street S.W., Suite 19T10, Atlanta, GA 30303-8927, 404.974.9406, OCR.Atlanta@ed.gov).

CougarVIEW (D2L Brightspace) Accessibility Information

CougarVIEW is our institution's version of D2L Brightspace, an online course platform. The accessibility page from the D2L website states, "We believe that every mind matters and access to high-quality learning should be universal...We constantly strive to ensure that our learning platforms work seamlessly with various assistive technologies to provide a great learning experience to people with diverse needs. We integrate the latest global accessibility standards into our product process and openly report conformance to the Web Content Accessibility Guidelines (WCAG) 2.1 Level AAA standards and compliance with Section 508 of the Rehabilitation Act, 1973." For more information go to D2L Accessibility.

House Bill 280 (Campus Carry)

Whether a fully online, blended classroom, or on-ground classroom student, you should become familiar with "campus carry" legislation. For information regarding HB 280 (Campus Carry), please refer to House Bill 280. It is the permit holder's responsibility to know and comply with the law.

Student Rights and Responsibilities

Information regarding student rights and responsibilities can be found in the CSU Student Handbook.

CougarVIEW Privacy Statement

Read the CougarVIEW learning management system developer's (D2L Brightspace) privacy statement here.

Academic Honesty

Students: Please refer to the CSU Student Handbook (2020-2021) for additional information on academic honesty.

All students are expected to recognize and uphold standards of intellectual and academic integrity. As a basic and minimum standard of conduct in academic matters that students be honest and that they submit for credit only the products of their own efforts. Both the ideals of scholarship and the need for fairness require that all dishonest work be rejected as a basis for academic credit. They also require that students refrain from any and all forms of dishonorable or unethical conduct related to their academic work.

Examples of Academic Dishonesty include but are not limited to: Plagiarism, giving or receiving unauthorized assistance on exams, quizzes, class assignments or projects, unauthorized collaboration, multiple submissions (in whole or part) of work that has been previously submitted for credit. Plagiarism is any attempt to represent the work or ideas of someone else as your own. This includes purchasing or obtaining papers from any person and turning them in as your own. It also includes the use of paraphrases or quotes from a published source without properly citing the source. All written assignments may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism. Please be aware that students found plagiarizing in this course will receive a zero for the assignment/exam, and may receive a zero for the course.

Tips for Success

1) Stay ahead of **Reading Assignments**.
2) Study the **Solved Problems** located at the end of each chapter.
3) Take the **Self-Tests** (Solutions available in Appendix H) to test your knowledge of important concepts).
4) Work the **Recommended Practice Problems** (Solutions to Even-Numbered Problems are available in Appendix G).
5) Review my **Video Lectures** (Content > Module *X*: *Title* > Module *X* GPS, where *X* = 1, 2, …, 6).
6) Keep the **Deadlines** for homework assignments and exams in your calendar.
7) Do **not procrastinate** – completing all course requirements ahead of the schedule eliminates the avoidable time pressure.

Technical Requirements

Hardware Requirements

o   Access to a computer (at home, on campus or at work) and broadband internet access.
o   Access to a webcam and audio.
o   Chrome, Firefox 3.0 or higher, Safari (latest version- MACs only) or Microsoft Edge.
o   Permission/ability to install plug-ins or class software (e.g. Adobe Reader or Flash).
o   Check your system here: CougarVIEW System Check.
o   **IMPORTANT:** Internet Explorer is NOT compatible with CougarVIEW.
o   **IMPORTANT:** Chromebooks, iPads/tablets, Android devices, and smartphones are NOT compatible with LockDown Browser and Respondus Monitor.

Software Requirements

o   Microsoft Office 365 is available free to all CSU students and available at the following link: Microsoft Office 365.
o   To open PDF files, you will need to download Adobe Reader.

Minimum Technical Proficiency

Students should be able to complete the following tasks:

o   Navigate web sites, including downloading and reading files from web sites.
o   Download and install software or plug-ins such as Adobe Reader or Flash. Save files in commonly used word processing formats (.xlsx, .docx, .rtf).
o   Use a webcam for remote proctoring.
o   Copy and paste text, graphics and other items on a computer. Locate information on the Internet.
o   Save and back up your work files to your computer's hard drive and/or to a secondary repository source such as a flash drive or cloud-based storage.

Technical Support

If you need technical support or need assistance configuring your computer, please go to the link located in the "Technical Resources" widget located on your "My Home" and your "Course Home" pages. Most technical problems can be resolved by reviewing the knowledge base help pages. **You can also contact the CougarVIEW Help Desk 24/7 at 1-855-772-0423**.

THE FIRST TASK (due by <u>Wednesday, August 16</u>)

> To learn about you, <u>email</u> me at ho_johnny@columbusstate.edu (subject line: *Bio*) with your bio. Please include your name, hometown, where you live, major, class status, prior education, and hobbies/interests, etc. Upon receiving your bio, I will send you an acknowledgment email. **Completion of this task will verify your attendance. <u>Important: Students who do not complete The First Task by the deadline will be withdrawn from the course.</u>**

Course Structure

This course is organized into six modules, as shown in the following table.

Module	Topic(s)
M1: Foundation	Ch.1: Introduction to Quantitative Analysis Ch.2: Probability Concepts and Applications
M2: Decision Sciences	Ch.3: Decision Analysis Ch.5: Forecasting
M3: Inventory	Ch.6: Inventory Control Models
M4: Linear Programming	Ch.7: Linear Programming Models: Graphical & Computer Methods Ch.8: Linear Programming Applications
M5: Network Models	Ch.9/Module 8: Transportation and Assignment Ch.11: Project Management
M6: Queuing	Ch.12: Queuing Theory Models

Recommended Practice Problems

Ch./Mod.	Topic	Problems
Ch.1	Introduction	15, 16, 17, 18, 19, 20, 21, 22
Ch.2	Probability	15, 16, 18, 26, 29, 30, 32, 34, 36, 38, 43, 44, 45, 56, 57
Ch.3	Decision Analysis	17, 18, 19, 20, 22, 24, 30, 36, 38, 40, 41, 42
Ch.5	Forecasting	15, 16, 18, 20, 23, 25, 29, 34, 38, 39
Ch.6	Inventory	20, 21, 22, 23, 24, 26, 28, 34, 36, 38, 42, 52. 54
Ch.7	L.P. Models	14, 16, 18, 20, 22, 24, 26, 28, 30
Ch.8	L.P. Applications	1, 2, 3, 4, 6, 8, 10, 12, 14, 16
Ch.9	Transportation – Part 1	7, 8, 12, 14, 23
Module 8	Transportation – Part 2	13, 14, 15, 16, 17, 24, 25, 30
Ch.11	Project Management	12, 13, 16, 17, 22, 23, 24, 27, 28
Ch.12	Queuing Models	10, 11, 12, 13, 14 except part (f), 24, 27, 29, 30, 32

Course Schedule: All due dates listed are set at 11:59 pm Eastern on deadline dates.

Late submissions (homework assignments, postings, or exams) will not be accepted.

Date	Module	Reading Assignment	Assignment Due Date	Participation Closing Date	Examination Date
M, 8/14	1	Ch. 1			
T, 8/15	1	Ch. 1			
W, 8/16	1	Ch. 2	The First Task		
R, 8/17	1	Ch. 2			
F, 8/18	1	Ch. 2			
M, 8/21	1	Ch. 2			
T, 8/22	1	Ch. 2			
W, 8/23	1	Ch. 2			
R, 8/24	1	Ch. 2			
F, 8/25	1	Ch. 2			
M, 8/28	2	Ch. 3			
T, 8/29	2	Ch. 3		Participation 1	
W, 8/30	2	Ch. 3			
R, 8/31	2	Ch. 3			
F, 9/01	2	Ch. 3			
M, 9/04		*Labor Day*			
T, 9/05	2	Ch. 3			
W, 9/06	2	Ch. 3			
R, 9/07	2	Ch. 3			Practice Test
F, 9/08	2	Ch. 5			
M, 9/11	2	Ch. 5	HW 1		
T, 9/12	2	Ch. 5			
W, 9/13	2	Ch. 5			
R, 9/14	2	Ch. 5		Participation 2	
F, 9/15	2	Ch. 5			
M, 9/18					Exam 1, Chs.1–3 & 5
T, 9/19	3	Ch. 6			
W, 9/20	3	Ch. 6			
R, 9/21	3	Ch. 6			
F, 9/22	3	Ch. 6			
M, 9/25	3	Ch. 6			
T, 9/26	3	Ch. 6			
W, 9/27	3	Ch. 6			
R, 9/28	4	Ch. 7		Participation 3	
F, 9/29	4	Ch. 7			
M, 10/02	4	Ch. 7			
T, 10/03	4	Ch. 7			
W, 10/04	4	Ch. 7			
R, 10/05	4	Ch. 7			
F, 10/06	4	Ch. 7			
M, 10/09	4	Ch. 8			
T, 10/10	4	Ch. 8			
W, 10/11	4	Ch. 8	HW 2		
R, 10/12	4	Ch. 8			
F, 10/13	4	Ch. 8			
M, 10/16	4	Ch. 8		Participation 4	
T, 10/17	4	Ch. 8			
W, 10/18					Exam 2, Chs. 6–8

R, 10/19	5	Ch. 9			
F, 10/20	5	Ch. 9			
M, 10/23	5	Ch. 9			
T, 10/24	5	Module 8			
W, 10/25	5	Module 8			
R, 10/26	5	Module 8			
F, 10/27	5	Module 8			
M, 10/30	5	Module 8			
T, 10/31	5	Ch. 11			
W, 11/01	5	Ch. 11			
R, 11/02	5	Ch. 11			
F, 11/03	5	Ch. 11		**Participation 5**	
M, 11/06	5	Ch. 11			
T, 11/07	5	Ch. 11			
W, 11/08	6	Ch. 12			
R, 11/09	6	Ch. 12			
F, 11/10	6	Ch. 12			
M, 11/13	6	Ch. 12			
T, 11/14	6	Ch. 12			
W, 11/15	6	Ch. 12	**HW 3**		
R, 11/16	6	Ch. 12			
F, 11/17	6	Ch. 12		**Participation 6**	
11/20-11/24	*Happy Thanksgiving!*				
W, 11/29					**Final Exam**

Important Dates

THE FIRST TASK (see page 6 for more details):

To learn about you, email me at ho_johnny@columbusstate.edu (subject line: *Bio*) with your bio. Please include your name, hometown, where you live, major, class status, prior education, hobbies and interests, etc. Completion of this task will verify your attendance. **Important: Students who do not complete the First Task by Wed., August 16th will be withdrawn from the course.**

HOMEWORK ASSIGNMENTS (see page 2):

HW 1: Sep 11th. HW 2: Oct 11th. HW 3: Nov 15th.
Homework assignments will be posted to CougarView two weeks before they are due.

PARTICIPATION (see page 2):

The closing date for Module 1 Participation (M1 Part) is Aug 29. The closing dates for M2 Part, M3 Part, M4 Part, M5 Part, and M6 Part are Sep 14, Sep 28, Oct 16, Nov 3, and Nov 17, respectively.

EXAMS (see page 2):

Practice Test for LockDown Browser + Respondus Monitor: Thursday, Sep 7. It is a requirement.

Exam 1: Monday, Sep 18. Exam 2: Wednesday, Oct 18. Final: Wednesday, Nov 29.

- A one-page formula sheet (8.5 x 11, on one-side only) is allowed in all exams (smartphones/cell phones/ and smart watches, etc., are prohibited).

- ***All exams require the use of LockDown Browser & Respondus Monitor (LB+RM), cost: $15.*** LB+RM is a remote proctoring service that allows you to take your exams from anywhere *using a webcam, a microphone,* and *an internet connection*.