



School of Business and Communication
Masters in Business Administration

BU 324 – Quantitative Methods in Business

Online Asynchronous

Credits:3

Section: 1

Term: Summer 2026

Instructor Information



Instructor: Kelly Holden, PhD

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Phone: 808-212-5445

Office Location: Available via Zoom Personal Meeting Room:

Office Hours: Email me to make an appointment

Virtual Office: <https://hawaii.zoom.us/j/9480866001>

Virtual Office Hours: M-F 8-10am HST/or by appointment – email me

Communication

Everything you need for the course is already laid out week to week within the Canvas Classroom. You will receive emails along the way based on your completion of the course. I do review the classroom daily M-F and so typically you will get feedback on any submission or question within 24 hours, but feel free to reach out to me if you need something sooner or it's outside of my set virtual office hours.

School & Department Information

School of Business and Communication

Office Location: Kieffer Hall, Room 12

Phone: (808) 739-8369

If you have questions regarding the [School of Business and Communication](#), feel free to reach out to me.

Course Description & Materials

BU324 QUANTITATIVE METHODS IN BUSINESS CATALOG DESCRIPTION

Each of the business disciplines uses quantitative information in its planning, operations, and performance evaluation. This course introduces students to a variety of methods and tools for using quantitative data effectively: linear programming, Bayes Decision Rules, forecasting, multiple regression, network models, utility measures and inventory models. Offered every semester. Prerequisites: MA 103, BU 224.

COURSE OVERVIEW

Many organizations have demonstrated that Quantitative Analysis is an effective competitive tool. When used with well-conceived marketing and financial plans, organizations have made major penetrations into global and other markets. This course is designed to address the key challenges that have strategic as well as tactical implications, faced by organizations in the service, business, and manufacturing sectors. Computer-based applications and examples are extensively used in this edition to help students to understand and connect management science with real world business. Successful procedures are applied to problems showing step-by-step “how – to” instructions. The use of application software allows focusing on managing and solving problems and less time on memorizing algorithms. Business analytics, one of the hottest topics in the business world, makes extensive use of the models in this textbook. A discussion of the business analytics categories is provided, and the relevant management science techniques are placed into the appropriate category. This course is designed to promote student participation through discussion of current business issues as they relate to the quantitative methods and how they are used in today’s digital organization for managerial decision-making processes.

Time Allocation

This is a three-credit hour course requiring 135 clock hours of student engagement, per the official CUH Credit Hour Policy. Over the 15 weeks of this course, students will spend 37.5 hours in class, 48 hours researching and writing a ten-page essay, 1 hour each week writing reflection papers (15 hours total), and 10.5 hours studying for and taking the final exam. There will be an additional 24 hours of work required beyond what is listed here (course readings, homework assignments, etc.), averaging 1.6 hours each week.

Required Materials

Quantitative Analysis for Management, Barry Render, Ralph M. Stair, Jr., Michael E. Hanna, Trevor S. Hale Pearson 14th Edition, ISBN: 9780135319321

Canvas

Our course website in Canvas can be accessed by clicking this link:

<https://chaminade.instructure.com/courses/47060>

Technical Assistance for Canvas Users:

- Visit the [Student Resources page for Distance learners](https://chaminade.edu/distance-education/resources-for-students/) (<https://chaminade.edu/distance-education/resources-for-students/>)
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu or call (808) 735- 4855

Tutoring and Writing Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua 'Ike: Center for Student Learning in a variety of subjects (including, but are not limited to: biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua 'Ike's website (<https://chaminade.edu/advising/kokua-ike/>) for the latest times, list of dropin hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – TutorMe. For more information, please contact Kōkua 'Ike at tutoring@chaminade.edu or 808-739-8305.

Hardware Requirements: Canvas is accessible from both PC and Mac computers with a reliable internet connection. You will also need to be able to access audio and video files.

Subsequently, you should have access to speakers or headphones that allow you to hear the audio.

Software Requirements: You will need to have some ability to listen to audio in an mp3 format, watch videos in mp4 format, stream online videos, and read .pdf files. There are a number of free software online that can be downloaded for free. If you need assistance with locating software please feel free to contact the Chaminade Help Desk at helpdesk@chaminade.edu or (808) 735-4855.

Learning Outcomes

Program Learning Outcomes (PLOs)

Upon completion of [degree program name], the student will be able to:

1. **List** and use appropriate quantitative tools, including statistics and management science, for decision-making process (knowledge).

2. **Describe** the functional areas of business, including central theories, modes of analysis, tasks, and strategies (comprehension).
3. **Demonstrate** the usage integrative and reflective thinking to assess and create business strategy appropriate for organizations in specified business environments (application).
4. **Appraise and evaluate** the legal obligations of organizations and the ethical dilemmas faced by businesses, along with appropriate frameworks for addressing these dilemmas (evaluation).
5. **Formulate and organize** the connections between academic work and real-life situations as a result of the Service-Learning experiences (synthesis).

Course Learning Outcomes (CLOs)

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

1. **Understand** the role of quantitative analysis in the overall business strategy of an organization (lower costs, increase production, reach revenue goals, grow investments, etc.).
2. **Recognize** the use of the scientific approach in managerial decision-making processes. For example, learning to locate warehouses in order to deliver customers goods within minimum time and cost goals.
3. **Gather, process, manipulate, transform, and interpret** raw data into meaningful information; for example, to reflect the results of clinical trials based on conformance with product safety standards.
4. **Recognize** the interdependence of quantitative analysis and other key functional areas in the organization. Consider Toyota's recent quality problems that currently influence customers' perception of the Toyota brand and quality. What is the best role for Toyota's Quality Assurance and marketing groups in order to regain customers' trust if Toyota is to remain number one global car manufacturer?
5. **Identify and evaluate** key factors: quantitative and qualitative and the interdependence of these factors in selecting appropriate models for an effective decision-making process; consider new technology breakthroughs and the influence of legislative acts and regulations upon the usage of such technologies. You may wish to consider legislative actions and outcomes, e.g., statutory changes on cell phone use while driving, in developing these models and processes.

Marianist Values

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and

development:

1. Education for formation in faith.
2. Provide an integral, quality education.
3. Educate in family spirit.
4. Educate for service, justice and peace, and integrity of creation.
5. Educate for adaptation and change.

Native Hawaiian Values

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Ōlelo No'ēau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'ēau 364) May I live by God.
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'ēau 1957) Acquire skill and make it deep.
3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'ēau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship.
4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'ēau ('Ōlelo No'ēau 1430) Education is the standing torch of wisdom.
5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'ēau 203) All knowledge is not taught in the same school

Alignment of Course Learning Outcomes

	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Marianist Values	1, 2	2	4, 1	3, 2	5
PLOs	1	2	4	3	5
Native Hawaiian Values	1, 2, 3, 4	1, 2, 3, 4	4, 5	1, 4, 5	1, 2, 3, 4, 5

Course Activities

This course is designed to promote student participation through discussions of current business issues as they relate to management decision-making processes. Students will study

and apply quantitative techniques to practical issues and decisions faced by management to include global markets. Thus, it is important to know quantitative methods and understand their limitations and assumptions in order to use them appropriately.

Applications, technology, and audio-visual tools will make this course highly interactive and experiential.

The undergraduate course will be taught, as follows:

- a) Lectures supported by PowerPoint presentations.
- b) Case Studies will be presented in the classroom to illustrate concepts and develop critical thinking skills and approaches to real-life business issues.
- c) Supplementary materials and handouts will be provided to students to aid in understanding quantitative concepts.
- d) Chapter handouts will be made available to students; these handouts will be used by students to follow the lectures, Power Point presentations and for note taking purposes. These handouts can be used for exam preparation.
- e) Excel QM and POM-QM for Windows Version 3 will be used, where possible and as time permits to make classes more interesting and trigger classroom discussions.

Your final grade will be based on your performance on exams and quizzes, assignments, class participation, and professionalism.

- The average student can expect to spend approximately 15 hours per module preparing for and studying in this online asynchronous class.
- Active student participation in all required discussions and weekly assignments is required.
- Honest communication with me personally or via e-mail is expected if any unexpected changes occur in your life.

Recommended Learning Strategies

1. Chapter Assignments must be read prior to each class. Students familiar with chapter materials will more effectively participate in class by being prepared to offer critical comments and pose thoughtful questions.
2. Complete self-tests after each chapter to reinforce the understanding of presented concepts.
3. Take tests and quizzes after each chapter to reinforce the learning material.
4. Deliver assigned homework on time.
5. Contribute to and participate in team projects. You will learn to become a confident public speaker and improve your presentation skills.
6. Participate in classroom discussions and ask questions.

7. Review supplementary materials in preparation for midterm and final exams.
8. Complete and return the final exam, as scheduled.

Computer Proficiency Expectations

Students in this course are expected to be proficient in the following technology areas:

- Canvas LMS
- Chaminade email
- Microsoft Word (or other word processing software), Excel, and PowerPoint

Course Policies

Course Attendance Policy

This is an online asynchronous class, and therefore, you are not required to attend any real-time live class sessions. Please make sure to have a good time management in place to successfully make it through this course in its allotted time frame. Mahalo!

Assessment

Assessment methods include quizzes, exams, oral and written assignments, class discussions, class activities, and group work. Every effort will be made to return all student work within two-weeks of the due date.

Grading and Assignments

Class sessions are designed to promote student participation through the discussion of current events in the business world as they relate to the use of quantitative analysis for managerial decision-making processes.

Grading Distribution/Final Grade Requirements

Exam #1 (Midterm Exam) = 100 points

Exam #2 (Final Exam) = 260 points

10 Module-Based Quizzes = 200 points

10 Module-based Discussions = 200 points

8 Case Study Assignments = 240 points

Total Points Possible: 1,000 Points

A = 900 or more

B = 800 to 899

C = 700 to 799

D = 600 to 699

F = Below 600

Grading Standards

“A” students do not miss classes during the semester. They read and critically engage all the assigned readings before class on their own, and with classmates and the instructor. All assignments are not only complete but go beyond more than just the minimum requirements. Their assignments are turned in on time or early, exhibit proper style, grammar, and format, are well-organized, integrate strategic planning and targeting, and are written precisely and concisely. They take advantage of all rewrite and extra credit opportunities. These students always keep up with current news events, both locally and globally.

“B” students miss a few classes during the semester. They usually read the assigned readings before class. Their assignments exhibit proper style, grammar, and format, are well-organized, integrate strategic planning and targeting, and are written precisely and concisely. They take advantage of all rewrite and extra credit opportunities. These students usually keep up with current events.

“C” students miss several classes during the semester. They complete the assigned readings before exams. Written assignments and exams usually exhibit proper style and formatting, but do not always integrate strategic planning and targeting, and are not always well organized or written precisely and concisely. All assignments are turned in on time, and most rewrite opportunities are used. These students sometimes keep up with current events.

“D” students miss four or more classes during the semester and skim assigned readings. Assignments and exams usually exhibit proper style and formatting, but they often lack integrated strategic planning and targeting, and are often not well-organized, or written precisely and concisely. Assignments are not always turned in on time and only some rewrite opportunities are used. They don’t keep up with current events.

“F” students fail to attend class consistently, miss exams, written assignments; don’t use rewrite opportunities.

Suggestions for Success

Manage your time wisely and stay organized! Learn how to use the required technology. Come to class prepared. Engage in the learning, discussions, and activities that take place in the classroom. Don’t be distracted or distract others. Always do your best! 😊

Challenging a Grade on an Individual Assignment

Should a student find at any point during the semester that they wish to challenge a grade they have received on an assignment, they are welcome to do so. Following are the grade challenging guidelines:

- Students must wait 48 hours after receipt of their assignment before challenging the grade.
- Grade challenges must be submitted in writing via email, in respectful and professional prose.
- Students must articulate, based on the merits of their work (not on circumstances) and the guidelines of the assignment/rubric, why they feel their grade should be amended.
- Students have up to 2 weeks to challenge an assignment grade, attempts to challenge a grade after 2 weeks from receiving an assignment back will be automatically forfeited.

Students also retain the right to academic grievance for final course grades through standard Chaminade processes should they feel this step is necessary.

Course Approach

This course is utilizing a Flex model, meaning the only due dates you have are

- 1) Your course completion Schedule, which is due by 11:59pm on the Sunday of your first week in this class – **July 12, 2026.**
- 2) All other assignments must be submitted by 11:59 pm on the last day of class - **September 15, 2026.**

The Flex model provides you with the convenience and ability to work at your own pace and complete assignments when it is convenient for you. You can work as fast as you want, meaning you can complete the course however quickly you'd like, as long as you finish prior to the last day of class.

Grades of "Incomplete"

Incomplete grades are reserved for cases of illnesses and other emergencies that cause a student to be unable to complete the course by the due date. In such cases, the instructor has the option of issuing an "incomplete" grade at the end of the semester. Requests for an "incomplete" must be accompanied by substantive documentation.

Writing Policy

APA Style writing will be used in this class. For more information about this writing style, please visit: <https://apastyle.apa.org/>

Instructor and Student Communication

Questions for this course can be emailed to the instructor. Online, in-person and phone conferences can be arranged. Response time will take place up to 24 hours.

Important Information

Academic Honesty

Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an "F" grade for the course, suspension, or dismissal from the University.

For the most up to date information, please refer to the [Academic Honesty Policy](#) on the Chaminade University Catalog website.

Title IX and Nondiscrimination Statement

Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator.

Nondiscrimination Policy & Notice of Nondiscrimination

Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and

its regulations, including in admission and employment. Inquiries about Title IX may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both and contact information may be found at the [Chaminade University Title IX Office Contact Information and Confidential Resources website](#). On-campus Confidential Resources may also be found here at [CAMPUS CONFIDENTIAL RESOURCES](#).

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at: <https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the [Campus Incident Report form](#). Chaminade University of Honolulu prohibits sex discrimination in any education program or activity that it operates. The NOTICE of NONDISCRIMINATION can be found here: [Notice of Nondiscrimination](#).

CUH Alert Emergency Notification

To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cellphone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

Assessment for Student Work

With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

Student with Disabilities Statement

Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008).

Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them.

Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors each semester, as the student is responsible to notify Kokua Ike via email at ada@chaminade.edu each semester if changes or notifications are needed.

Kōkua 'Ike: Tutoring & Learning Services

Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua 'Ike: Center for Student Learning in a variety of subjects (including, but are not limited to biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check [Kōkua 'Ike's](#) website for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click on Account > TutorMe. For more information, please contact Kōkua 'Ike at tutoring@chaminade.edu or 808-739-8305.

Schedule

Module	Module Work	Suggested Timeline
Module 0	Initial Assignments: Course Completion Plan and Participation in the Community of Practice (CoP)	MUST be done by end of week 1 – Sunday, July 19
Module 1	Chapter 1 and Module 9 slides, Assignment 1, Case study 1, Quiz 1	Sunday, July 19
Module 2	Chapter 3 and Module 1 slides, Assignment 2, Case study 2, Quiz 2	Sunday, July 26
Module 3	Chapter 2 and Module 3 slides, Assignment 3, Case study 3, Quiz 3	Sunday, August 2
Module 4	Chapter 4 slides, Assignment 4, Case study 4, Quiz 4	Sunday, August 9
Module 5	Chapter 5 slides, Assignment 5, Case study 5, Quiz 5	Sunday, August 16
Module 6	Chapter 7 and 8 Slides and Module 7 slides, Assignment 6, Case Study 6, Quiz 6	Sunday, August 23
Module 7	Chapter 6 and 13 slides, Assignment 7, Case Study 7, Quiz 7	Sunday, August 30
Module 8	Chapter 11 and 12 slides, Assignment 8, Case Study 8, Quiz 8	Sunday, Sept 6
Module 9	Chapter 9 and Module 2 slides, Assignment 9, Case study 9, Quiz 9	Sunday, Sept 13
Module 10	Chapter 15 slides, Assignment 10, Case Study 10, Quiz 10 and Final Capstone Project.	**Monday, Sept 21 -Note – ALL work is due TODAY!!