

# **Course Syllabus**

<u>Chaminade University Honolulu</u> 3140 Waialae Avenue - Honolulu, HI 96816

Course Number: MBA 746-01-03

Course Title: Business Analytics for Strategic Decision Makers

Department Name: Management Science, Business Analytics, Computer Information Systems (CIS)

**College/School/Division Name**: School of Business and Communication **Term**: (Jan 9<sup>th</sup> to March 20th, 2023) OYMBA/Spring 2022 Semester

Course Credits: 4

Class Meeting Days: Saturdays (in person and online)

Class Meeting Hours: 1PM to 4:30PM HST

Class Location: Kieffer 9 Classroom/Canvas Learning Management System (LMS)

Instructor Name: Eduard "Eddie" Merc, Ph.D., MBA (Please call me Eddie. ©)

Email: Eduard.Merc@chaminade.edu

Phone: (435) 200-4822 (Google Voice Number)

Office Location: Kieffer Hall, Room 27

Office Hours: Wednesdays from 12PM to 1PM or By Appointment

Instructor Website: https://chaminade.edu/business-and-communication/business-

faculty/eduard-merc/

Other Professional Contact Information: eduardmerc (Skype) and @EdkoPletko (Twitter)





Chaminade University offers its students an education in a collaborative learning environment that prepares them for life, service, and successful careers. Guided by its Catholic, Marianist and liberal arts educational traditions, Chaminade encourages the development of moral character, personal competencies, and a commitment to build a just and peaceful society. The university offers both the civic and church communities of the Pacific region its academic and intellectual resources in the pursuit of common aims.

#### **University Course Catalog Description**

Catalog Description: 746 Business Analytics for Strategic Decision Makers

This course the modern combination of Operations Research and Management Information Systems. Operations Research grew up in the twentieth century and became very mathematically sophisticated. MIS also began in the latter part of the twentieth century. The cloud storage, big data computations, block chain security, and GDPR combining the two systems became possible. It was originally called Business Intelligence but in the last three years the term Business Analytics has become more popular.

#### **Course Overview**

This course is designed to equip students with knowledge, technical skills, and industry-perspective necessary to perform data-driven decision making. Students of all majors and skill levels are welcome. Professionals in each major discipline (Accounting, Marketing, Management, Supply Chain, etc.) can benefit from improving their data access and analysis skills.

This course provides an overview on how to capture, package, investigate and present data to enable data driven decision-making, and improved business performance.

Good decision makers should be able to recognize and formulate decision problems, represent the essential structure of the decision situation, and analyze the problem using appropriate tools and techniques in order to recommend various courses of action.

In this course, you will learn a balanced approach to practice and theory regarding how to conduct data-based analysis by examining a variety of modern analytical tools and techniques.

Lastly, the course participants learn the key decision-making concepts in common scenarios (production, inventory, sales, etc.) by daily analysis of provided datasets. Participants will solve business problems in a fact-based, data-driven, and iterative manner by analyzing specific business case studies that relate to business intelligence scenarios.

Overall, this is a theory-based course intertwined with a basic overview and examples of various real-world data analytics tools, such as MS Excel (Pivot Tables), SQL Server, and Business Objects (BO).

This course is being taught by Dr. Eddie Merc. Canvas is used for this course where you will find various types of assignments. All of your weekly homework will be done in Canvas.

## **Course Learning Outcomes (CLOs)**

By the end of our course, students will be able to:

- Understand the overview of business intelligence, analytics, and data science
- Explore and understand the nature of data, statistical modeling, and visualization (descriptive analytics)
- Define and structure a decision problem.
- Identify external and internal organizational sources of data available for decision making.
- Describe the basics of business intelligence and data warehousing
- Explore the principles of data mining process, methods, and algorithms (predictive analytics)
- Understand the basic principles of text, web, and social media analytics (predictive analytics)
- Explore, describe, and summarize data using optimization and simulation (prescriptive analytics)
- Become proficient in big data concepts and tools
- Gain a perspective on the BI tools available and their appropriateness for management, BI's future trends, privacy, and managerial considerations in analytics

## **Program Learning Objectives (PLOs)**

- 1. Communicate effectively regarding business related tasks, in both oral and written modes.
- 3. Undertake analysis, perform tasks, and develop strategies using the central concepts of each functional area of business.

#### Student Learning Outcomes - Service Learning

1. To demonstrate an understanding of the connections between academic work and real-life situations.

#### **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
- 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 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

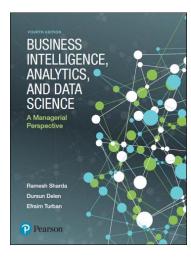
- 1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God
- 2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep
- 3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 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'eau ('Ōlelo No'eau 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'eau 203) All knowledge is not taught in the same school

#### **Course Prerequisites**

Please check Chaminade's Course Catalog for any pre-requisites for this class at: <a href="https://catalog.chaminade.edu/">https://catalog.chaminade.edu/</a>

# **Required Learning Materials**

#### Textbook:



Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4th Edition

Ramesh Sharda, Dursun Delen, Oklahoma State University, Efraim Turban, ©2018 Pearson

#### **Purchase Links:**

- Amazon Website: <a href="https://amzn.to/3HQVixK">https://amzn.to/3HQVixK</a>
- Pearson Website: <a href="https://www.pearson.com/us/higher-education/program/Sharda-Business-Intelligence-Analytics-and-Data-Science-A-Managerial-Perspective-4th-Edition/PGM1228434.html">https://www.pearson.com/us/higher-education/program/Sharda-Business-Intelligence-Analytics-and-Data-Science-A-Managerial-Perspective-4th-Edition/PGM1228434.html</a>

#### **Course Website:**

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

https://chaminade.instructure.com/courses/19469

#### **Technical Assistance for Canvas Users:**

- Search for help on specific topics or get tips in <u>Canvas Students</u>
- Live chat with Canvas Support for students
- Canvas Support Hotline for students: +1-833-209-6111
- Watch this video to get you started
- Online tutorials: click on "Students" role to access tutorials
- Contact the Chaminade IT Helpdesk for technical issues: <a href="helpdesk@chaminade.edu">helpdesk@chaminade.edu</a> 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 (<a href="https://chaminade.edu/advising/kokua-ike/">https://chaminade.edu/advising/kokua-ike/</a>) 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 Account – Notifications – TutorMe. For more information, please contact Kōkua 'Ike at <a href="tutoring@chaminade.edu">tutoring@chaminade.edu</a> or 808-739-8305.

#### **Course Expectations**

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

- The average student can expect to spend approximately 6-9 hours per week preparing for this 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.
  - o Note: In case of class cancelation, you will be notified via Canvas and your Chaminade email.

## **Computer Proficiency Expectations**

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

- Canvas LMS
- Chaminade email
- Microsoft Word and Excel

#### **Course Attendance Policy**

Students are expected to attend daily and log in to Canvas daily to check for course announcements, materials, and assignments. You are encouraged tom attend our informal online class sessions in Zoom from time to time to ask questions about the course content or homework. Your attendance in these "office hour" online meetings is not required but highly recommended. I will provide the session recording afterwards for your review.

## **Behavioral Expectations**

In the online classroom, civil discourse must be adhered to both in synchronous live meetings as well as asynchronous discussion rooms and/or interactions whether they are with the instructor or peers. Students should use proper netiquette at all times online.

Every student has the right to a respectful learning environment. In order to provide this right, students must take individual responsibility to conduct themselves in a mature and appropriate manner. I appreciate your serious approach to education.

#### **Assessment**

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

Class assignments are divided into the following groups:

#### **Canvas Content and Homework**

- Weekly study materials
- Weekly online article submissions/discussions
- Weekly content quizzes, midterm, and final exam
- Final Individual Project (Analytics of a Business Organization)

## **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**

Attendance = 50 points

Exam #1 (Midterm Exam) = 150 points

Exam #2 (Final Exam) = 200 points

10 Quizzes = 200 points

Weekly Online Article Summaries = 100 points

Final Individual Project/Presentation = 300 points

# **Final Grade Requirements**

A = 900 or more B = 800 to 899 C = 700 to 799 D = 600 to 699 F = Below 600

#### Exams (Midterm: 150 points + Final: 200 points = 350 points) (CO, 1, 2, 3)

Two major exams will cover material from class lectures, class discussion, handouts, and assigned readings. Exams may include multiple-choice, short-answer and essay questions. **There are <u>no make-up exams</u> without proper documentation** for your absence, which must be provided prior to the absence if at all possible. A missed exam will count as a zero.

#### Quizzes (10 @ 20 points each = 200 points) (CO, 1, 2, 3)

Fifteen quizzes will cover material from class lectures, discussions, videos, handouts and assigned readings. Students will complete assigned chapter quizzes in Canvas. Each quiz has approximately 5 to 10 questions. Quizzes are due every <u>Tuesday by 23:59PM HST</u>. **There are <u>no make-up quizzes</u> without proper documentation**, which must be provided prior to the missed quiz if at all possible. Any missed quiz will count as a zero.

# Weekly Online Article Summaries/Discussions (10 @ 10 points each = 100 points) (CO, 1, 2, 3)

Each student will post (via Canvas Discussion Forums) a short 10-20 sentence summary of any type of an article that relates to weekly class topic(s) based on our readings. In your post, please describe why you have selected the article, and how it relates to our weekly topic(s) as well as what you have learned from reading the article that relates to the weekly chapter materials.

Summaries must be posted each week on <u>Friday by 11:59PM HST</u> (Midnight). Students are required to also make a *substantive* response comment (avoid "I liked this!" or "Good job!") on at least two of their peers' article summaries each week by <u>23:59PM HST on Tuesdays</u> in order to receive full credit for the assignment.

## Final Individual Project (300 points) (CO, 1, 2, 3)

Each student will work on a research project by selecting a company of their choice to analyze the fundamentals of business analytics and its associated internal processes in that organization. Each student will also present his/her own findings in a pre-recorded online video presentation that will be submitted to the instructor for grading in Canvas. More details about this project will be provided in a handout to all students during the first few weeks of the semester.

#### **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 Policies**

#### **Late Work Policy**

All work in this course will be due at 23:59PM HST Midnight every Tuesday, at which point online submission boxes will promptly close. Late work is NOT accepted in this course. Assignments which are not submitted on or before their due date will receive an automatic zero. If you find that you are having technical difficulties, please contact the Chaminade IT Helpdesk for issues related to Chaminade technology. If you have documentation from the Helpdesk indicating that they have identified a problem with the technology, I will allow you to submit the assignment once a resolution has been reached at no penalty to you. If students are unsure of their home technology, they should plan ahead to use the computer lab on-campus in order to submit work in a timely manner.

## **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: <a href="https://apastyle.apa.org/">https://apastyle.apa.org/</a>

#### Instructor and Student Communication

Questions for this course can be emailed to the instructor at <a href="mailto:Eduard.Merc@chaminade.edu">Eduard.Merc@chaminade.edu</a>. Online, in-person and phone conferences can be arranged. Response time will take place up to 24 hours.

## Cell phones, tablets, and laptops

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

## **Disability Access**

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from Kōkua 'Ike: Center for Student Learning by the end of week three of the class, in order for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

#### **Title IX Compliance**

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

#### **Attendance Policy**

The following attendance policy is from the 2019-2020 Academic Catalog (p. 54-55). Faculty members should also check with their divisions for division-specific guidelines.

Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, calling the instructor's campus extension, or by leaving a message with the instructor's division office. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade.

Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu Tutor Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes.

Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

#### **Academic Conduct Policy**

From the 2019-2020 Undergraduate Academic Catalog (p. 39):

Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook: <a href="https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf">https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf</a>

## **Credit Hour Policy**

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 45 hours of engagement. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester, 10-week term, or equivalent amount of work over a different amount of time. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit.

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

# **Schedule**

# Schedule of Lectures, Readings, and Weekly Homework:

Module #/Week #	Assignment Title	Due Date
Module 1 Week #1	Class/Student Introductions; Chapter #1 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (1/17) at 23:59PM HST in Canvas
Module 2 Week #2	Chapter #2 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (1/24) at 23:59PM HST in Canvas
Module 3 Week #3	Chapter #3 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (1/31) at 23:59PM HST in Canvas
Module 4 Week #4	Chapter #4 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (2/7) at 23:59PM HST in Canvas
Module 5 Week #5	Chapter #5 Reading/Review; Chapter Quiz; Article Discussions; Midterm Exam; Final Project Draft #1 Due	Tuesday (2/14) at 23:59PM HST in Canvas
Module 6 Week #6	Chapter #6 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (2/21) at 23:59PM HST in Canvas
Module 7 Week #7	Chapter #7 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (2/28) at 23:59PM HST in Canvas
Module 8 Week #8	Chapter #8 Reading/Review; Chapter Quiz; Article Discussions	Tuesday (3/7) at 23:59PM HST in Canvas
Module 9 Week #9	Chapter #9 Reading/Review; Chapter Quiz; Article Discussions; Final Project Draft #2 Due	Tuesday (3/14) at 23:59PM HST in Canvas
Module 10 Week #10	Chapter #10 Reading/Review; Chapter Quiz; Article Discussions; Final Exam; Final Project Presentations and Project Submission	Tuesday (3/21) at 23:59PM HST in Canvas

Aloha from Professor Eddie Merc, Ph.D./MBA

**Miscellaneous Student Notes:**