



# SYLLABUS



3140 Waialae Avenue  
Honolulu, Hawai'i 96816-1578

## 1. FACULTY CONTACT INFORMATION

### BU-224-01-1 Applied Business Statistics

Pearson portal myLab Statistics, ID = [brownlow91609](#)

#### Class Schedule:

Dates:	January 08, 2024 – May 03, 2024
Department Name:	School of Business and Communication (SBC)
Course Credits:	Three (3)
Class Meeting Hours:	<a href="#">M W F @8:30 AM – 09: 20 AM</a>
Location:	<a href="#">SULV 201</a>
Instructor:	Maria Brownlow, Ph.D. Management Science, Business Strategy, Business Analytics/Informatics, Computer Information Systems (CIS)
Contact Info:	808-739-8337 (office)
Office Hours:	Tu Th 11:45 AM – 12:30 PM or by appointment
CUH email:	<a href="mailto:maria.brownlow@chaminade.edu">maria.brownlow@chaminade.edu</a>
Administrative Assistant to the Dean:	Linda Lau
Division Phone #:	808-739-8369



### CHAMINADE UNIVERSITY MISSION STATEMENT

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.

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DARE TO LEARN. DARE TO CHANGE.

“The future is no longer stable; it has become a moving target. No single “right” projection can be deducted from past behavior. The better approach, I believe, is to accept uncertainty, try to understand it, and make it part of our reasoning. Uncertainty today is not just occasional, temporary deviation from a reasonable predictability; it is a basic structural feature of the business environment.” <sup>1</sup>

### 2. COURSE INTRODUCTION AND OVERVIEW

University Catalog <https://catalog.chaminade.edu/>

#### **BU 224 Applied Business Statistics (3CR)**

The course introduces students to the use of statistical information for business decision-making. Topics include summary measures, frequency distributions, probability, sampling, statistical inference, and simple regression. Emphasis is given to the interpretation and meaning of statistical information. Prerequisites: MA103

Statistics is used every day in our lives – from buying a car (blue book review) to a new cancer treatment that became available passing medical trial. We make our investment decisions based on the technical analysis of the company stock over the period. Statistics influence and shape the world around us. Statistics using Excel illustrates the relationship between statistics and our world with a variety of decisions we make daily even if we do not realize this fact.

Using every day simple tool like Excel, an abstract theory becomes reality. Added tools such as DDXL and STATDISK enhance students’ learning.

Intro to Probability and Statistics course is designed to understand statistical tools in research and practice. This course places strong emphasis on understanding concepts of statistics. Topics are presented with illustrative examples, identification of required assumptions, and underlying theory is discussed during interactive lectures and videos.

Excel is used for calculations as a technology tool and instructions are provided along with typical displays of results. Results are reviewed and concluded with interpretation. In some cases, such as examples involving formulas and graphs—detailed instructions are presented so that Excel can be used effectively in all applications, instead of those relating only to statistics. Students enter professional careers with solid knowledge and skills that are needed.

The aim of this course is to present the fundamental concepts in a consistent and straightforward way so that students understand the need to master them. Achieving statistical thinking skills has always been an important challenge in mastering statistics. This course puts strong emphasis on understanding concepts of statistics and explaining and interpreting results. Without this skill the

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<sup>1</sup> Farsighted. How We Make the Decisions that Matter the Most” by Steven Johnson, New York Times best-selling author

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knowledge of numbers is useless – and it would be right to ask a question “So what?” Instead of blindly accepting and using formulas, we better have some understanding why and how they work, what does it mean?

This course is a building step to acquire knowledge and skills to conduct data modeling. Such vast data analysis is further used in business intelligence to make smart and effective decisions. We live in a projects-oriented economy where strategic modeling to predict behavior leads to efficient use of limited resources, including funds.

What is a critical thinking in statistics so that we avoid “GIGO” (garbage in, garbage out) results? Instead of blindly using formulas and procedures, students must think carefully about the context of the data, the source of the data, the method used in data collection, the conclusions reached, and the practical implications. Common sense to think critically about data and statistics and do not misuse them is one of the goals of this course.

The course topics are organized into five parts, as described in this textbook:

1. **Chapter 1 - 3:** Introduces statistics and describes, explores, and compares data. Summarizing and graphing data correctly “speaks better than words” allowing students to identify bad graphs that might be technically correct but misleading. It is important to understand how graphs are misleading. These chapters explain some fundamental tools used in statistical methods.
2. **Chapter 4 - 6:** Introduces and describes concept of probability and probability distributions. Sound understanding concept of probability values is the underlying foundation on which the methods of inferential statistics are built.

Major activities of inferential statistics are:

- Use sample data to estimate values of population parameters such as a population proportion or population mean, and
  - Test hypotheses or claims made about population parameters.
3. **Chapter 7 - 9:** These chapters focus on the use of sample data to estimate a population parameter and introduce the basic methods for testing claims or hypotheses that have been made about a population parameter.
  4. **Chapter 10:** In this chapter students learn methods for determining whether correlation or association between two variables exists and whether the correlation is linear. For linear correlations, students identify an equation that best fits the data and use that equation to predict the value of one variable given the value of the other variable.

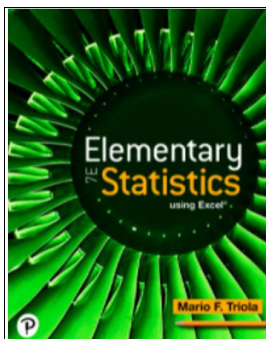
In this chapter, methods for analyzing differences between predicted values and actual values are presented. In addition, methods for identifying linear equations for correlations among three or more

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variables are discussed. In conclusion, some basic methods for developing a mathematical model that can be used to describe nonlinear correlations between two variables is presented.

**Chapter 14:** Students will learn that important characteristics of data are changing patterns over time. Statistical process control deals with this issue. The main objective of this chapter is to learn how to construct and interpret control charts that can be used to monitor changing characteristics of data over time. That knowledge will better prepare students for work with businesses trying to improve the quality of their goods and services.

Use of technology for developing conceptual understanding and analyzing data throughout the course is extensive. All assignments are paperless through use of myLab Statistics giving students ability to learn the subjects as they do their assignments (homework, quizzes, tests, and exams) via help tools included in myLab Statistics.<sup>2</sup>



Textbook: **Mario F. Triola** “**Elementary Statistics using Excel,**” *Seventh Edition*, Pearson, Prentice Hall, Inc., **Textbook ONLY**, (Unbound and Saleable)  
**ISBN-13:** 9780136937432

**Minimum Requirements:**

MyLab Statistics with Pearson e-text – 18 weeks Standalone Access Card -- for Elementary Statistics Using Excel, 7th Edition; Format: Access Code Card  
**ISBN-13:** 9780136961888

### 3. INSTITUTIONAL LEARNING OUTCOME

1. Written communication
2. Oral communication
3. Critical thinking
4. Information literacy
5. Quantitative reasoning

### 4. BUSINESS ADMINISTRATION PROGRAM LEARNING OUTCOMES (PLO)

UPON COMPLETION OF THE B.A. UNDERGRADUATE PROGRAM IN BUSINESS ADMINISTRATION, STUDENTS WILL BE ABLE TO:

1. **Communicate** effectively regarding business related tasks, in both oral and written modes.
2. **Select** and use the proper quantitative tools for decision-making.
3. **Undertake** analysis, perform tasks, and develop strategies using the central concepts of each functional area of business.
4. **Assess** and create business strategies proper for organizations in specified business environments, including global and domestic markets.

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<sup>2</sup> Textbook: **Mario F. Triola** “**Elementary Statistics using Excel**”

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5. **Discuss** the legal obligations of organizations and the ethical dilemmas they face, along with proper frameworks for addressing these dilemmas.
6. **Discuss** the distinctive features and challenges of conducting business internationally.
7. **Serve** as an effective individual contributor to a group process and deliverable.
8. **Use** business skills to promote service, justice, and peace within community organizations.<sup>3</sup>

### 5. COURSE LEARNING OUTCOMES (CLO).

At conclusion of the course, students will be able to:

1. **Define** and **explain** basic statistical concepts such as mean, median, mode, variance, and standard deviation.
2. **Apply** probability concepts to solve business problems and make predictions.
3. **Conduct** linier regression analysis to model relationships between variables.
4. **Interpret** the Multiplication Rule by computing the probability of some event, given that some other event has already occurred.

### Alignment of Learning Outcomes: PLO, CLO with Marianist, and Hawaiian Values

	CLO 1	CLO 2	CLO 3	CLO4
Marianist Values	2	2	5	5
Native Hawaiian Values	2	2	5	5
Program Learning Outcomes (PLO)	2	3	3	2

### 6. MARIANIST VALUES

“An education in the *Marianist Tradition* in marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development Characteristics of Marianist Universities: Chaminade University of Honolulu, St. Mary’s University, University of Dayton, A Resource Paper, published in 1999, Republished in 2006.”

1. **Educate for formation in faith.**

<sup>3</sup> <https://chaminade.edu/business-and-communication/business-administration/>

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*“As higher educational institutions, Marianist universities have kept, along with education in the disciplines, a commitment to the development of the whole person, which includes the dimension of religious faith and its personal appropriation and practice.”*

### **2. Provide an integral quality education.**

*“In the Marianist approach to education, “excellence” includes the whole person, not just the technician or rhetorician. It also includes people with their curricular and extra-curricular experiences, their intellectual and spiritual development, understood and supported best in and through community.”*

### **3. Educate in family spirit.**

*“Marianist educational experience fosters the development of a community characterized by a sense of family spirit that accepts each person with loving respect and draws everyone in the university into the challenge of building community. Community support for scholarship, friendship among faculty, staff and students, and participation in university governance characterize the Marianist University.”*

### **4. Educate for service, justice, and peace.**

*“The Marianist approach to higher education is deeply committed to the common good. The intellectual life itself is undertaken as a form of service in the interest of justice and peace, and the university curriculum is designed to connect the classroom with the wider world. In addition, Marianist universities extend a special concern for the poor and marginalized and promote the dignity, rights, and responsibilities of all peoples.”*

### **5. Educate for adaptation and change.**

*“In the midst of rapid social and technological change, Marianist universities readily adapt and change their methods and structures so that the wisdom of their educational philosophy and spirituality may be transmitted even more fully.”*

## **7. 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 (‘Olelo 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 (‘Olelo No‘eau 1957) [Acquire skills and make them deep.](#)

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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 and using it has no boundaries.*
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.*

### 8. ASSESSMENT AND GRADING

Grades will be based on the following assessment tools to improve and evaluate student learning outcomes through:

1. Homework, quizzes, tests, and exams.
2. Flow Cart Animation, ending with questions to evaluate comprehension of concepts and definitions.
3. End of Chapter review questions.

### GRADING

Grading is based on the following table shown on the nest page:

<p><b>GRADING YOUR ACCOMPLISHMENTS:</b></p> <ul style="list-style-type: none"> <li>Homework assignments</li> <li>Quizzes &amp; tests</li> <li>Exams</li> <li>Staying on schedule with assignments and class participation → <b>Priceless</b></li> </ul>	<p><b>GRADE SCALE:</b></p> <ul style="list-style-type: none"> <li>A = 90% – 100%</li> <li>B = 80% – 89%</li> <li>C = 70% – 79%</li> <li>D = 60% – 69%</li> <li>F* = 50% – 69%</li> </ul> <p style="color: red; font-size: small;">IF*= Incomplete F gives student 30-days to work on missing assignments. Needs a strong justification. Rarely used. Individually decided by instructor, Program Director, and student.</p>
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Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades are calculated from the student's assignments, class participation, quizzes, tests, term papers, reports, and exams. They are interpreted as follows:

A	Outstanding scholarship and an unusual degree of intellectual initiative.
B	Superior work done in a consistent and intellectual manner.
C	Average grade showing a competent grasp of subject matter.
D	Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work.

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F*	Did not grasp the minimum subject matter, no credit given.
W	Withdrawal before published deadline.
I*	The issuance of an “I” grade is not automatic. At the discretion of the faculty member, a grade of “I” may be assigned to a student who completed a few assignments, but unable finished the homework due to unforeseen circumstances.
IP	In progress, primarily used for thesis completion or practicum completion.
AU	Audit.

Learning is never ending process. We learn every day by seeing, solving problems, making mistakes and trying not to repeat them. Student responsibility is discovering your own style of learning. Educators’ responsibility is to create a learning environment that student flourish.

### TENTATIVE SCHEDULE

The course schedule will be provided during Day One kick-off meeting. Schedule is subject to change at the discretion of the instructor based on students’ progress. Syllabus and Course Schedule is posted on the Pearson myLab Statistics in Document Sharing folder.

### What students need to know about my pedagogy, how to succeed in such an environment?

1. Maintain open an honest communication.
2. You have a question, just ask me, or send me email to [maria.brownlow@chaminade.edu](mailto:maria.brownlow@chaminade.edu)
3. This Statistics course resides on the Pearson myLab Statistics portal specifically developed for this textbook.
4. You grade yourself by submitting assignments into myLAB Statistics.
5. If you obtained a grade that you did not expect and you want to review incorrect answers and re-do them, you are welcome to do this within the next two weeks. Practice is learning.
6. Exams are scheduled thought the semester when a section of the logical material is completed.
7. Exams cannot be repeated and must be completed within assigned dates. If unusual circumstances had occurred, and you let me know before the date of the exam, the exam will be rescheduled. Each request to re-do the exam will be considered individually.

### 9. 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 proper resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

### 10. CREDIT HOUR POLICY



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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 a minimum of 45 hours of engagement, regardless of varying credits, duration, modality, or degree level. 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. Terms that have alternative lengths, such as 15-weeks terms, should have an equivalent amount of faculty instruction and out-of-class student work to meet each credit hour. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit. The number of engagement hours may be higher, as needed to meet specific learning outcomes.

### *Specific Credit Situations*

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, practice, studio work, and preparation of papers, presentations, or other forms of assessment.

This policy is by federal regulations and regional accrediting agencies.

Assuming a three-credit hour course requires key assessments (there is no essay in this quantitative), mid-term exam, and final exam, the time calculation would be as follows:

- **Seat Time:**
  - 50 minutes MWF = 150min weekly x 15 weeks = 2,250 minutes or **37.5 hours**
- **Time Spent on Key Assessments:**
  - **Assignments** in myLab Statistics type homework, quizzes, tests, interactive videos, and simulations is 3-times per week X 1.2 hrs. of study X 15 weeks = **54 hours**
  - **Exams** = 8 exams scheduled over the semester period X 3 hrs. studying = **20 hours**
  - **Additional time** for volunteering to participate in the community projects = **5 hours** per semester participating in community projects as assigned (reading, researching, compiling data, participating in community initiatives)
- Sub-Total = 37.5 hrs. + 54 hrs. + 20 hrs. + 5 hrs. = 116.5 hours (seat time + key assessments)
- Total required engagement 135 hours - 116.5 hours = **18.5 hours** remaining to fill as contingency
- The 18.5 hrs. divided by 15 weeks = 1 hours of additional time each week (reading, studying, working on homework, volunteering community projects)

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This is a three-credit hour course requiring 135 clock hours of student engagement, per the official CUH Credit Hour Policy. Students enrolled in this course anticipated to spend **37.5 hours** in class, **63 hours** on past due assignments and grades improvements, **24** studying for 8 exams and additional **5** hours on community service projects. There will be an additional 18.5 hours of work required beyond what is listed here (course readings, homework assignments, etc.), averaging 1.23 hours each week.

### 11. COURSE POLICIES

Undergraduate Catalog, 2023-2024 Academic Year

<https://catalog.chaminade.edu/>

#### Grades to improve.

1. If you obtained a grade that you did not expect and you want to review incorrect answers and re-do them, you are welcome to do this within the next two weeks. Practice is learning.
2. I do not deduct points.

#### Writing Policy

In writing papers, use MLA or APA writing recommendations (preferred MS Word, Calibri #12).

#### Instructor and Student Communication

Questions for this course can be emailed to the instructor at [maria.brownlow@chaminade.edu](mailto:maria.brownlow@chaminade.edu), in-person, and phone conferences can be arranged. Response time to emails will take place up to 24 hours. Office hours are Tu Th 11:45 – 01:00 PM in Kieffer room #28.

#### Email Guidelines:

- Use your Chaminade email account for communication. CANVAS email is proprietary, internal to CANVAS, and cannot be saved in Gmail and MS OUTLOOK.
- Always include a subject line your course ID, for example, CIS-103-01-1.
- Remember without facial expressions some comments may be taken the wrong way. Be careful in wording your emails. Use of emoticons might be helpful in some cases.
- Special formatting such as centering, audio messages, tables, html, etc. should be avoided unless necessary to complete an assignment or other communication.

#### 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.

### 12. CHAMINADE UNIVERSITY POLICIES

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### **Disability Access**

If you need individual accommodation 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, for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodation, they should contact the Kōkua 'Ike Coordinator at (808) 739-8305 for further information.

### **Attendance Policy**

The following attendance policy is from the 2019-2020 Academic Catalog (p. 54-55).

Students are expected to regularly attend all courses for which they are registered. Students should notify their instructors when illness or other extenuating circumstances prevent them from attending class and arrange 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 does not have 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 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 students 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.

### **Student Conduct Policy**

Campus life is a unique situation requiring the full cooperation of everyone. For many, Chaminade is not only a school, but a home and a place of work as well. That makes it a community environment in which the actions of one student may directly affect other students. Therefore, each person must exercise a high degree of responsibility. Any community must have standards of conduct and rules by which it operates. At Chaminade, these standards are outlined to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations



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of the community standards are managed 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 authority 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 under Student Life.

For further information, [please refer to the Chaminade Catalog](#).

### **Use of Technology to Harass**

No under any circumstances student may use technology to harass any person.

### **Tutoring and Writing Services**

Chaminade is proud to offer free, one-on-one tutoring and writing aid 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 Account – Notifications – TutorMe. For more information, please contact Kōkua 'Ike at [tutoring@chaminade.edu](mailto:tutoring@chaminade.edu) or 808-739-8305.

### **Library:**

Supply a link to the Chaminade library, [www.chaminade.edu/library](http://www.chaminade.edu/library)

### **Privacy and Confidentiality**

See Catalog, page #50

Here are a few important items "You Need to Know:"

24-Hour Chaminade University **Emergency Information Hotline (808) 739 - 7499; (833) 739 - 7499**  
University Emergency Information webpage: <https://chaminade.edu/emergency/>

### **Technical Support:**

CANVAS Technical Support is **1-877-251-6615**

Technical Assistance for Canvas Users:

Search for help on specific topics at [help.instructure.com](http://help.instructure.com)

[Chat lives with Canvas Support 24/7/365](#)



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Watch this [video to get you started](#) with online guides and tutorials.

Contact the Chaminade IT Helpdesk for technical issues:  
[helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu) or call 808-735-4855