



# Chaminade University OF HONOLULU

**Course Number:** EID 216

**Course Title:** Design Principles and Methodologies for Innovative Problem Solving

**Department Name:** Environmental and Interior Design

**College/School/Division Name:** School of Humanities, Arts and Design

**Term:** Spring 2025

**Course Credits:** 3

**Class Meeting Days:** Monday and Wednesday

**Class Meeting Hours:** 10.00-11.20

**Class Location:** Ching 254

## Instructor Information

**Instructor Name:** Matthew Higgins

**Email:** [matthew.higgins@chaminade.edu](mailto:matthew.higgins@chaminade.edu)

**Phone:** 510-680 6501

**Office Location:** Eiben 208

**Office Hours:** Monday/Wednesday 1.00-3.00 and by appointment

## Course Description & Materials

### University Course Catalog Description

This introductory course examines principles of design as a problem-solving medium, employing design thinking methodologies—the process by which innovative solutions can be optimized—to address various challenges we face in the world today. As global scale problems grow increasingly complex, they cannot be solved within singular or isolated fields of study. They call for a cooperative, multidisciplinary approach; thus collaboration between students from diverse disciplines is integral to achieving the objectives of the course. To promote innovation, students will be encouraged to think outside the box, challenge conventional wisdom, and be bold in their actions. The methodologies that will be covered include: multi-perspectival problem analysis, idea generation (brainstorming techniques), idea translation (visualization techniques), prototype development (implementation/ experimentation), and evolution (iterative modification and future adaptation).

### Course Overview

This course explores a range of different ways to generate a design idea. The various assignments address topics specifically related to typography, perception, abstraction, philosophy, and psychology. It will also consider how

storytelling, allegory, and game playing are used to create designs that contain what the architect Luis Barragán called “the elements of magic, serenity, sorcery and mystery.”

### **Time Allocation**

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 are anticipated to spend 48 hours in class, 20 hours for research assignments, 20 hours for practical assignments, 40 hours on reading reviews and final essay, and 7 hours on preparation for class presentations.

### **Course Prerequisites**

There are no prerequisites for this course.

### **Required Learning Materials**

To be confirmed during the course.

### **Grading Scale**

The assessed work is graded on a pass/fail basis. Grades will only be given to work that is submitted through the Canvas system.

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

- Search for help on specific topics or get tips in [Canvas Students](#)
- [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 Helpdesk for technical issues: [helpdesk@chaminade.edu](mailto:helpdesk@chaminade.edu) or call (808) 735-4855

## **Learning Outcomes**

### **Program Learning outcomes**

Upon completion of the undergraduate B.F.A. program in Environmental + Interior Design, students will be able to:

1. Understand, and operate within, the dictates and standards of the design profession/industry.
2. Explore and apply the design process from project inception to actualization/realization.
3. Integrate principles of design in order to synthesize and optimize design solutions.
4. Safeguard the welfare of occupants and the public at large, and promote the ecological balance between the natural and built environments.
5. Communicate design concepts, design solutions, and problem-solving rationales through written, oral, and visual media.
6. Evaluate, articulate, and actualize the social, environmental and ethical impact of design on the health, safety and welfare of the public to further service, justice and peace.

### **Course Learning Outcomes**

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

1. Recognize and apply the various different conceptual design strategies introduced in the class lectures. (CIDA 3, 4)
2. Identify and evaluate the interplay of conceptual ideas that direct the design of existing buildings. (CIDA 4, 9)

3. Design within a collaborative environment. (CIDA 5)
4. Begin to construct a personal design language and philosophy.
5. Design using models, hand drafting and other depictive techniques. (CIDA 9)
6. Develop a range of oral and written presentational skills. (CIDA 6)

### 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 ('Olelo No'eau 364) May I live by God
2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kũ'ono'ono ('Olelo 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 ('Olelo 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 kũ o ka no'eau ('Olelo 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 ('Olelo No'eau 203) All knowledge is not taught in the same school

### Alignment of Course Learning Outcomes

	CLO 1	CLO 2	CLO 3	CLO 4	CLO5	CLO6
<b>Marianist Values</b>	2	2	2, 3	4, 5	2	2
<b>PLOs</b>	2, 3	2, 3	3, 4, 5	5	1, 5	5
<b>Native Hawaiian Values</b>	2	2	2, 3	4, 5	2	2

## Course Activities

### Assessment

- Five Short Assignments (12% each)
- Two Research Presentations (10% each)
- Six Reading Reviews (12%)
- Reflective Essay (8%)

## Course Policies

### Instructor and Student Communication

Questions for this course can be emailed to the instructor at [matthew.higgins@chaminade.edu](mailto:matthew.higgins@chaminade.edu). Online, in-person and phone conferences can be arranged. Response time will take place up to 24 hours.

### Late Work Policy

All work is expected to be presented on time.

## Important Information

### 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](mailto:ada@chaminade.edu)).

### 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](#).

### Attendance Policy

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 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: <https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf>

### **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 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 10 week 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.

### **Kōkua 'Ike: 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 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.

## Schedule

Module 1: Response	Jan.	6	Course Introduction	
		8	Lecture 1: Pattern Perception	
		13	Group 1: Research Presentation 1	
		15	Lecture 2: Spatial Perception and Materiality	Begin Assignment 1
		20	(no class)	
Module 2: Imagery		22	Lecture 3: Memory & Storytelling	
		27	Present Assignment 1	Begin Assignment 2
		29	Lecture 4: Journey & Boundaries	
	Feb.	3	Group 2: Research Presentation 1	
Module 3: Context		5	Lecture 5: Climate, Place and Site	
		10	Present Assignment 2	Begin Assignment 3
		12	Lecture 6: Culture and Traditions	
		17	(no class)	
Module 4: Parameters		19	Lecture 7: Building Characteristics & the Design Brief	
		24	Present Assignment 3	Begin Assignment 4
		26	Lecture 8: Function & Regulations	
	Mar.	3	Group 3: Research Presentation 1	
Module 5: Process		5	Lecture 9: Geometry	
		10	Present Assignment 4	
		12	Lecture 10: Modular Planning	
		17	(no class)	
		24	Lecture 11: Form-making & Visual Metaphors	
		26	(no class)	
		31	Group 1: Research Presentation 2	
Module 6: Theory	Apr.	2	Lecture 12: Utopianism	Begin Assignment 5
		7	Group 2: Research Presentation 2	
		9	Lecture 13: Society & Politics	
		14	Present Assignment 5	
		16	Lecture 14: Contemporary Philosophies	
		21	Group 3: Research Presentation 2	
		23	Lecture 15: Future Trends	
		28	Reflective Essay Submission	

Times and events are subject to change.