Course Syllabus

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 2024
Course Credits: 3
Class Meeting Days: Tuesday and Thursday
Class Meeting Hours: 10.00-11.20
Class Location: Eiben 108

Instructor Name: Matthew Higgins
Email: matthew.higgins@chaminade.edu
Phone: 510-680 6501
Office Location: Eiben 208
Office Hours: Monday/Wednesday 1.00-3.00 and by appointment

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. Topics to be addressed in the course will be selected by students as a class. 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 typology, 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."

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

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)

Course Prerequisites

There are no prerequisites for this course.

Required Learning Materials

To be confirmed during the course.

Course Website:

https://chaminade.instructure.com/courses/21062

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 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 ʻIke: 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 ʻIke'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 ʻIke at tutoring@chaminade.edu or 808-739-8305.

Assessment

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

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.

Course Policies

Late Work Policy

All work is expected to be presented on time.

Instructor and Student Communication

Questions for this course can be emailed to the instructor at matthew.higgins@chaminade.edu. 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
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.

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, 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.

How This Course Meets the Credit Hour Policy
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.

Schedule

	Jan.	9	Course Introduction	
Module 1: Response		11	Lecture 1: Pattern Perception	
		16	**Group 1: Research Presentation 1**	
		18	Lecture 2: Spatial Perception and Materiality	Begin Assignment 1
		23	**Present Assignment 1**	
Module 2: Imagery		25	Lecture 3: Memory & Storytelling	Begin Assignment 2
		30		*(no class)*
	Feb.	1	Lecture 4: Journey & Boundaries	
		6	**Present Assignment 2**	Begin Assignment 3
Module 3: Context		8	Lecture 5: Climate, Place and Site	
		13	**Group 2: Research Presentation 1**	
		15	Lecture 6: Culture and Traditions	
		20	**Present Assignment 3**	Begin Assignment 4
Module 4: Parameters		22	Lecture 7: Building Characteristics & the Design Brief	
		27	**Group 3: Research Presentation 1**	
		29	Lecture 8: Function & Regulations	
	Mar.	5	**Present Assignment 4**	Begin Assignment 5
Module 5: Process		7	Lecture 9: Geometry	
		12	**Group 1: Research Presentation 2**	
		14	Lecture 10: Modular Planning	
		19		*(no class)*
		26		*(no class)*
		28	Lecture 11: Form-making & Visual Metaphors	
	Apr.	2	**Group 2: Research Presentation 2**	
Module 6: Theory		4	Lecture 12: Utopianism	
		9	**Present Assignment 5**	Begin Assignment 6
		11	Lecture 13: Society & Politics	
		16	**Group 3: Research Presentation 2**	
		18	Lecture 14: Contemporary Philosophies	
		23	**Present Assignment 6**	Begin Reflective Essay
		25	Lecture 15: Future Trends	
		30	**Reflective Essay Submission**	

Times and events are subject to change.