

College of Business, Innovation, and Technology
Environmental + Interior Design
EID 220-01-1: The Anatomy of Buildings: Building Systems & Components
Class Location: Eiben 108
Meeting Schedule: MW 4:00 pm - 5:20 pm
Credits: 3 Term: Fall 2026

Instructor Information

Instructor: Dimitri Damiel Kim, AIA, Dipl.-Ing.
Email: dimitri.kim@chaminade.edu
Office Location: [TBD]
Office Hours: [TBD and by appointment]
Virtual Office: [Zoom link to be posted in Canvas]
Virtual Office Hours: [TBD and by appointment]

Communication

Canvas announcements and university email are the primary forms of course communication. Students should check both regularly. The instructor will ordinarily respond within 24–48 hours on working days. Questions requiring extensive review should be brought to office hours.

School & Department Information

College of Business, Innovation, and Technology (CBIT)
Office Location: See current CBIT / university directory.

Questions regarding the Environmental + Interior Design program may be directed to the instructor.

Course Description & Materials

Catalog Course Description

EID 220 Building Systems & Components (3 credits). This course focuses on understanding the different systems and components that comprise a building, how they relate to and affect one another, and how to design within the context of those systems. Students are introduced to building infrastructure and performance mandates, as well as relevant building codes, with emphasis on the coordination and integration of systems within the building interior. Content includes building codes and life safety; site analysis; fire safety; structural, mechanical,

electrical, and plumbing systems; wall, floor, ceiling, and stair assemblies; and interior building components.

Course emphasis: EID 220 is taught as a case-study-based, general-mastery course focused on how buildings work and how building systems affect interior design. Each major topic is introduced through a selected work of architecture and its historical, technological, material, environmental, or cultural context, using project drawings, photographs, diagrams, and technical documentation as appropriate. Francis D. K. Ching, *Building Construction Illustrated*, serves as the central technical reference: assigned readings reinforce the terminology, definitions, and general construction principles encountered through the case studies. Weekly applications connect this knowledge directly to interior design decisions, coordination, occupant needs, and documentation.

Co-requisites/Pre-Requisites: Prerequisites: EID 200 and EID 202.

Time Allocation

This is a three-credit course requiring approximately 135 clock hours of student engagement under the CUH Credit Hour Policy. Across the semester, students should expect approximately 37.5 hours of scheduled class meetings and 97.5 hours of work outside class. Outside work includes assigned Ching readings and case-study/project readings (approximately 25 hours), weekly interior-design technical applications and homework (approximately 30 hours), development of the semester group project and technical documentation (approximately 35 hours), and preparation for presentations and reviews (approximately 7.5 hours).

Required Materials

Required reference: Francis D. K. Ching, *Building Construction Illustrated*, current or recent edition. A PDF version of this book is widely available for download for free. Specific page ranges will be assigned in Canvas. Additional required readings, codes, technical references, drawings, and case-study materials will be provided through Canvas or the university library.

Recommended Items

Recommended references: Francis D. K. Ching, *A Visual Dictionary of Architecture* (Free PDF available); Julia McMorrough, *The Architecture Reference & Specification Book*; Corky Binggeli, *Building Systems for Interior Designers*; and current accessibility, life-safety, manufacturer, and construction references assigned by topic.

Canvas (<https://chaminade.instructure.com>)

Canvas is the central course platform for announcements, readings, drawing references, assignment briefs, submission links, grades, and schedule updates. Students are responsible for reviewing Canvas before each class and bringing assigned materials to class.

Learning Outcomes

Program Learning Outcomes (PLOs)

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

1. Professionalism — Apply and participate in ethical design practices at personal, project, peer, community, and industry levels.
2. Process — Identify design problems and demonstrate an understanding of the design process from inception through documentation and installation.
3. Principles & Priorities — Integrate research, historical context, theory, technical knowledge, and interdisciplinary collaboration in design decision-making.
4. Public & Environmental Protection — Understand the implications of design decisions for human interaction, health, safety, technological impact, and ecological balance.
5. Presentation — Communicate design concepts, technical analysis, and problem-solving justifications through written, oral, graphic, and digital media.

Course Learning Outcomes (CLOs)

Upon completion of EID 220, the student will be able to:

1. Building Systems and Integration — Demonstrate basic knowledge of the components and functions of major building systems and explain how they are coordinated and integrated within the building interior.
2. Building Codes and Regulations — Demonstrate basic knowledge of applicable building codes and regulations and explain how code requirements inform interior design decisions.
3. Occupant Safety and Comfort — Correlate building-system design and code compliance with occupant safety, accessibility, health, and environmental comfort.
4. Architectural Components and Construction — Identify interior architectural elements, explain their basic construction and assembly, and evaluate appropriate applications.
5. Schedules and Specifications — Explain the function of schedules and specifications and execute basic interior schedules and outline specification information.

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.

EID 220 supports integral, quality education by connecting technical knowledge to the ethical and practical responsibilities of designing for human occupation. Collaborative case-study work develops family spirit through shared inquiry and peer accountability. Code, accessibility, life-safety, comfort, environmental performance, and long-term building responsibility reinforce service, justice, peace, and integrity of creation. The course also educates for adaptation and change by asking students to compare historical and contemporary systems and to respond to evolving technologies, regulations, and modes of practice.

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'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

Alignment of Course Learning Outcomes

Alignment Cate-	CLO 1	CLO 2	CLO 3	CLO 4	CLO 5
Marianist Values	2, 5	2, 4	2, 4	2, 5	2, 3, 5
Program Learning	PLO 2, 4	PLO 4	PLO 4	PLO 2, 3	PLO 2, 5
Native Hawaiian	Na'auao; 'Aina	Na'auao; Aloha	Aloha; Na'auao	Na'auao; 'Aina	Na'auao; 'Ohana;
Primary Course	Systems map;	Code/ADA analy-	Egress, safety,	Assembly draw-	Finish/door

The alignment matrix identifies where each Course Learning Outcome contributes to the E+ID Program Learning Outcomes and Chaminade's Marianist and Native Hawaiian values. The final row identifies the principal assessable evidence used to determine whether students achieved each outcome. Several assignments address more than one outcome because building systems, codes, safety, construction, and documentation operate as an integrated body of knowledge.

Course Activities

Discussions

Discussion is integrated into case-study lectures, drawing and documentation reviews, technical demonstrations, and interior-design application exercises. Students are expected to complete assigned project and Ching readings before class, contribute informed observations, ask questions, and connect technical principles to the architecture under study and to interior design practice. **Participation is critical in evaluating your performance** and graded through preparation, constructive engagement, and contribution to collaborative learning.

Homework

Weekly in-class exercises and homework develop the five Course Learning Outcomes through applied interior-design studies. Typical work includes diagramming, building systems/code research, and building component identification/definition exercises. Assigned Ching readings reinforce technical terminology and principles introduced through the case studies. Work is submitted through Canvas unless otherwise directed and should be retained as a cumulative technical reference (See Individual Work)

Quizzes

Short comprehension checks **may be used** when needed to confirm reading and technical vocabulary. Any quiz will assess application and interpretation rather than isolated memorization and will be included within the weekly exercise and homework category.

Exams

No conventional midterm or final examination is planned Assessment is based on applied course work, the semester group project, and participation.

Individual Projects

Students will work on a semester-long building case-study project. Each project phase corresponds directly to one or more of the five Course Learning Outcomes. Student will use published project documentation and credible technical sources to explain how building systems, code requirements, occupant needs, construction components, and documentation affect the interior environment. Students will present their work digitally to the class and incorporate review comments into the final submission which will be outputted collectively as 'EID 202 Field Manual' (see Final Project)

Individual Work

Individual work includes weekly interior-design technical applications, Ching-based terminology and reading responses when assigned, short code and accessibility exercises, system-coordination studies, assembly sketches, component studies, and schedule/specification tasks. Although work may be discussed collaboratively, each student must submit work demonstrating individual comprehension unless the assignment is explicitly identified as student work

Final Project

The final project is the completed semester group case study, revised and assembled as a coherent digital technical presentation. The final submission must demonstrate all five Course Learning Outcomes by explaining the project's building systems and integration, relevant codes and regulations, occupant safety and comfort, architectural components and construction, and schedules/specifications through appropriate project documentation and technical references.

Assessment and Grading

Semester Group Project: 55%

Weekly In-Class Exercises and Homework: 35%

Participation: 10%

The semester project is assessed for technical understanding, accuracy, integration, graphic clarity, appropriate use of project documentation and technical references, and responsiveness to review. Weekly work is assessed for technical understanding, interior-design application, coordination, communication, completeness, and development across the semester.

Course Policies

Attendance

Regular attendance is essential because demonstrations, collaborative analysis, and in-class exercises **cannot be fully reconstructed outside class. Students should notify the instructor in advance when possible and remain responsible for missed content and assignments.** Attendance will be administered in accordance with current university and school policy.

Late Work

Assignments are due at the date and time listed in Canvas. Students should contact the instructor before the deadline when circumstances may prevent timely submission. Unapproved late work will receive a mandatory passing grade only*. Work submitted after the associated review or instructional sequence may receive limited or no feedback because later work builds on earlier phases.

Extra Credit

Any extra-credit opportunity will be announced to the entire class and will support the same learning outcomes and academic standards as required course work. TBA

Changes to the Syllabus

While the provisions of this syllabus are as accurate and complete as possible, **your instructor reserves the right to change any provision herein at any time.** Every effort will be made to keep you advised of such changes, and information about such changes will be available from your instructor.

Grades of Incomplete

Requests for a grade of Incomplete will be considered in accordance with current Chaminade University policy and only when the circumstances and remaining course requirements make an Incomplete appropriate. Students should contact the instructor as early as possible to discuss eligibility and required completion work.

Final Grades

Final grades are submitted to [Self-Service](#):

A = 90% and above

B = 80-89%

C = 70-79%

D = 60-69%

F = 59% and below

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.

Notes on the use of AI and Academic Honesty (TBD)

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. For pregnant and parenting students, I am also obligated to provide you with similar resources for support and protections available to you. My goal is to make sure that you are aware of the range of options available to you and have access to the resources and support you need.

Nondiscrimination Policy & Notice of Nondiscrimination

The university is committed to comply with all State and Federal statutes, rules, and regulations which prohibit discrimination. The university is committed to a policy of nondiscrimination on the basis of race, sex, gender identity and expression, age, religion, color, national origin (including shared ancestry and ethnic characteristics), ancestry, citizenship, disability, genetic information, marital status, breastfeeding, arrest and court record (except as permissible under State law), sexual orientation, or status as a covered veteran. Inquiries about Title IX or general Civil Rights concerns 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

[HERE](#). *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](#).

Hazing Prevention Resources and Athlete Helpline:

Assists athletes, parents, coaches, and any allies interested in ensuring physical and mental safety for sports communities by offering confidential emotional support, crisis intervention,

informational athlete-focused resources, and guidance related to concerns about any type of abuse—including hazing.

Chaminade University's Hazing Policy: <https://catalog.chaminade.edu/studenthandbook/codeofconduct>
<https://hazingpreventionnetwork.org/athlete-helpline/>
<https://hazingpreventionnetwork.org/how-to-report-hazing/>

Basic Needs Resources:

<https://chaminade.edu/basic-needs/>

Campus Safety/ SafeSwords

A program for students, faculty and staff, who may feel uncomfortable or unsafe walking alone on campus, at any time of the day. Call security, and a security professional will meet you at your location on campus. The security professional will escort you to your residence hall, car, etc. Students may utilize this when walking to and from night classes around campus or after late night events. [SafeSwords Webpage](#)

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 Kōkua 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 Kōkua 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.

Readings & Due Dates

Wk of	Theme	Info	Due Dates
8/17	Course Introduction + How Buildings Work: Parts, Systems, and Integration	Mon 8/17: informal course introduction; no formal technical material. Wed 8/19: introductory framework for major building systems, components, coordination, and their relationship to interior design. Required reference: Ching, <i>Building Construction Illustrated</i> , Ch. 2, <i>The Building</i> . CLO 1.	No graded work; Wednesday reading/preparation
8/24	How Buildings Stand and Span	Structural order, load paths, bays, walls, columns, floors, roofs, arches, and vaults. Case Study: <i>Basilica Palladiana</i> — Andrea Palladio. Ching reading assigned by chapter/section in <i>Canvas</i> . CLO 1, 4.	Structural/interior coordination study
8/31	How Buildings Are Put Together	Construction sequence, assemblies, shell and fit-out, connections, tolerances, and parts-to-whole relationships. Case Study: <i>Dome of Santa Maria del Fiore</i> — Filippo Brunelleschi. Ching reading assigned in <i>Canvas</i> . CLO 1, 4.	Assembly application
9/7	How Buildings Enclose Space	Envelope, openings, moisture, thermal layers, daylight, and consequences for interior conditions. Case Study: <i>Farnsworth House</i> — Ludwig Mies van der Rohe. Labor Day: Mon 9/7 no class; instructional meeting Wed 9/9. CLO 1, 3, 4.	Envelope/interior condition study
9/14	How Buildings Breathe and Maintain Comfort	HVAC, ventilation, thermal comfort, indoor air quality, zoning, and coordination with interiors. Case Study: <i>30 St Mary Axe / Swiss Re Building</i> — Foster + Partners. CLO 1, 3.	HVAC/interior coordination study
9/21	How Buildings Receive Power, Light, Water, and Waste	Electrical, lighting, plumbing, wet walls, service zones, ceiling coordination, and spatial consequences. Case Study: <i>Centre Pompidou</i> — Renzo Piano + Richard Rogers. CLO 1, 3.	MEP/ceiling coordination application
9/28	How Buildings Meet Code	Code structure, occupancy, construction type, fire ratings, and interpretation of requirements for interior design. Case Study: <i>Villa Savoye</i> — Le Corbusier + Pierre Jeanneret. CLO 2, 3.	Code application
10/5	How Buildings Provide Access	Accessibility and universal design: accessible routes, clearances, doors, toilets, reach ranges, and application to interiors. Case Study: <i>Maison à Bordeaux</i> — OMA / Rem Koolhaas. CLO 2, 3.	Accessibility application
10/12	WELLNESS WEEK	No class material, no new lesson, no case study, and no new assignment due during Wellness Week.	No new work due
10/19	How Buildings Support Safe Exit	Means of egress, occupant load, travel distance, exits, stairs, fire protection, and life-safety coordination. Case Study: <i>Kennedy Theatre</i> , University of Hawai'i at Mānoa — I. M. Pei. CLO 2, 3.	Egress/interior planning exercise
10/26	How Buildings Support Occupant Comfort	Daylight, visual comfort, privacy, material atmosphere, ergonomics, spatial experience, and human well-being. Case Study: <i>Hauer-King House</i> — Future Systems / Jan Kaplicky + Amanda Levete. CLO 3.	Occupant comfort application
11/2	How Interior Components Are Constructed	Partitions, doors, ceilings, floors, casework, stairs, material transitions, and introductory construction details. Case Study: <i>Barcelona Pavilion</i> — Ludwig Mies van der Rohe + Lilly Reich. CLO 4.	Interior component/assembly study
11/9	How Buildings Meet Responsibility	Professional, technical, environmental, maintenance, durability, adaptability, climate response, stewardship, and long-term obligations beyond minimum compliance. Case Study: <i>IBM Building</i> , Honolulu — Vladimir Ossipoff. Veterans Day: Wed 11/11 no class. CLO 1–4.	Responsibility statement/application
11/16	How Drawings, Schedules, and Specifications Coordinate	Drawing-set relationships; finish, door, furniture, fixture, and equipment schedules; outline specifications. Case Study: TBD — project selected for strong published technical documentation. CLO 5.	Draft schedules/specifications
11/23	Documentation Workshop and Coordination Review	Integrating systems, code, occupant needs, assemblies, schedules, and specifications into the semester group project. Thanksgiving schedule may modify meeting pattern.	Project draft review
11/30	Final Project Development + Comparative Synthesis	Student presentations, peer review, technical corrections, and comparative synthesis across building systems, code, comfort, construction, and documentation.	Final review draft
12/7	Final Presentations and Course Synthesis	Final digital case-study presentations and submission of the coordinated technical presentation.	Final project due