EID 216 / AR 103 COURSE SYLLABUS

Class hours: M/W 12:40-2:10   Email: elizabeth.lockard@chaminade.edu
Office: Eiben 211   Zoom Course ID#: 991 5279 9025
Office hours: By appointment   Zoom Course Password: EID216

COURSE DESCRIPTION

EID 216 Design Principles: Methodologies for Innovative Problem-Solving / AR 103 Visual Design (3cr)
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 traditional boundaries, challenge conventional wisdom, and be bold in their actions. Issue to be addressed in the course will be selected in 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). Prerequisites: Students should be highly motivated to tackle current issues, and demonstrate a willingness to explore and experiment!

COURSE FORMAT

This course meets twice a week and will consist of lectures, presentations, videos, and exercises. Any online sessions will be synchronous (in real-time), so you must attend the online classes during the class period via Zoom.

The course will consist of two design projects (alpha and beta) as well as a number of in-class activities for which participation is essential. Collaboration is also vital to the work of the course.

Unlike other courses you have taken in school, this course is not based on traditional measures of achievement but rather on the process of learning; and like all creative endeavors, there is no single or correct answer. Emphasis will be on exploration, experimentation, risk-taking, and thinking beyond conventional boundaries; failures along the way are to be expected. Projects will not be evaluated exclusively by their degree of effectiveness but also by the steps taken to derive an innovative solution.

COURSE LEARNING OUTCOMES

Students will be expected to:

#1: Examine a complex problem from various stakeholder perspectives through empathy-building (FS)

#2: Apply design thinking methods to generate and evaluate innovative ideas and actionable solutions to address complex problems in a rapidly changing world (SJP)(AC)(PLOs #2,4,6)

#3: Utilize visualization techniques to translate abstract ideas into physical expression (PLOs #3,5)

#4: Create and test prototypes of proposed design strategies (PLO #5)

#5: Collect data to gauge effectiveness of solution and to identify areas for improvement

#6: Build skills sets and explore creative methods of discovering, discerning, and/or expressing beauty through art forms and fields of inquiry (GELO: Creativity & Beauty)

#7: Identify the connection between their academic work and the service experience as well as reflect upon these connections through recognizing their role in issues of public concern, and understanding the importance of their civic engagement (GELO: S-L)

REFERENCES (digital versions of the readings will be provided in Canvas and/or Google Drive)

- *Glimmer: How Design Can Transform the World,* Warren Berger (PDF)
- *Apollo 13 (film) (1:20:45-1:21:47)(1:28:00-1:33:40)*
  https://www.amazon.com/gp/video/detail/B00D5UGM86/ref=atv_hm_hom_1_c_iEgOEZ_2_1
- *Extreme by Design (video)* https://www.youtube.com/watch?v=WOB4lep3TRw
- *The Art of Innovation (video)* https://www.youtube.com/watch?v=Mtjatz9r-Vc
- *Liter of Light (video)* https://www.youtube.com/watch?v=hPXjzsXJ1Y0
- *Design Thinking Toolkit (PDF)* https://designthinkingforeducators.com/toolkit/
- *Design Thinking Bootcamp Flashcards* https://dschool.stanford.edu/resources/design-thinking-bootleg

ADDITIONAL RESOURCES
- *Design for Social Impact (PDF)*
  https://new-ideo-com.s3.amazonaws.com/assets/files/pdfs/news/IDEO_RF_Guide.pdf
- *Field Guide for Human-Centered Design (PDF)*
  https://bestgraz.org/wp-content/uploads/2015/09/Field-Guide-to-Human-Centered-Design_IDEOorg.pdf
- *The Basics of User Experience Design (PDF)*
  https://www.socialsavvi.com/wp-content/uploads/2018/10/The-Basics-of-user-experience-design.pdf

REQUIRED MATERIALS
- 3x3 Post-Its (4 packages/colors)
- Black Sharpies
- Poster paper (36"x 48")
- Large roll trace paper (18")
- Favorite drawing instruments

GRADING & EVALUATION CRITERIA
- Willingness to explore/experiment, to challenge yourself, to take risks
- Process (research, methods, critical thinking)
- Innovation/novelty of ideas and feasibility/relevance of proposed solutions
- Collaboration and engagement
- Visual and oral communication skills

Exercises	20%	A = 91 – 100%
Alpha Project	15%	B = 81 – 90%
Beta Project:	65%	C = 71 – 80%
TOTAL	100%	D = 65 – 70%
		F = below 65%

E+ID PROGRAM LEARNING OUTCOMES

Students should be able to:

- Understand, and operate within, the dictates and standards of the design profession/industry
  (PLO #1: **Professionalism**) - *CIDA 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14*

- Explore and apply the design process from project inception to realization
  (PLO #2: **Process**) - *CIDA 4, 6, 9, 10, 11, 12, 13, 14*

- Integrate principles of design in order to synthesize and optimize design solutions
  (PLO #3: **Principles**) - *CIDA 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 14*

- Safeguard the welfare of occupants and the public at large, and promote the ecological balance
  between the natural and built environments
  (PLO #4: **Protection**) - *CIDA 2, 3, 4, 7, 8, 10, 12, 13, 14*

- Communicate design concepts, design solutions, and problem-solving rationales through written,
  oral, and visual media
  (PLO #5: **Presentation**) - *CIDA 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14*

- 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
  (PLO #6: **Marianist Values**)

MARIANIST & HAWAIIAN VALUES

Education for formation in faith	(Mana) E ola au i ke akua (ʻŌlelo Noʻeau 364) - May I live by God
Provide an integral, quality education	(Naʻauao) Lawe i ka maʻalea a kūʻonoʻono (ʻŌlelo Noʻeau 1957) - Acquire skill and make it deep
Educate in family spirit	(ʻOhana) ʻIke aku, ʻike mai, kōkua aku kōkua mai; pela iho la ka nohana ʻohana (ʻŌlelo Noʻeau 1200) - Recognize others, be recognized, help others, be helped; such is a family relationship
Educate for service, justice and peace	(Aloha) Ka lama kū o ka noʻeau (ʻŌlelo Noʻeau 1430) - Education is the standing torch of wisdom
Educate for adaptation and change	(Aina) ʻAʻohe pau ka ʻike i ka hālau hoʻokahi (ʻŌlelo Noʻeau 203) - All knowledge is not taught in the same school

COURSE POLICIES

Attendance Policy
Students are expected to regularly attend class. Student should notify their instructors by email when illness or other circumstances prevents them from attending class. Student must make arrangements to complete missed assignments on their own; this is not the responsibility of the instructor. Three unexcused absences or tardies may lead to a grade reduction for the course. Six unexcused absences may result in being withdrawn from the course by the instructor.

Late Work
Any assigned coursework not submitted by the prescribed deadline will be considered late, and will be subject to grade reduction at the discretion of the instructor. Should you be unable to complete an assignment on time, you should contact the instructor in advance to discuss the circumstances.

Mobile Devices
Out of consideration for your classmates, please set your cell phone to silent mode during class. Use of cell phones during class time is prohibited, except for emergencies.

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. If you would like to determine if you meet the criteria for accommodations, contact the Counseling Center at (808) 735-4845 for further information.

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. If you or someone you know has been harassed or assaulted, please report this matter promptly to either the Dean of Students or the Counseling Center.

Refer to CUH Student Handbook for further information on the following policies:
- **Academic Honesty**
- **ADA Accommodation**
- **Title IX Compliance**
- **Academic Conduct**

Social Distancing Safety Protocols
For the most up to date information, please refer to: https://chaminade.edu/coronavirus/

EID 216 COURSE SCHEDULE

Week #01:   M 8/24 – Course Introduction
              W 8/26 – What is Design Thinking?

Week #02:   M 8/31 – The Creative Process; Visual Communication (sketching)
              W 9/02 – Show & Tell (Analysis); Problems & Solutions; Alpha Project Overview & Video

Week #03:   M 9/07 – [Labor Day]
              W 9/09 – PPE mock-ups & ideation sketches

Week #04:   M 9/14 – Alpha Project Presentations
              W 9/16 – Beta Project Overview & Zoom Interviews; Software Overview

Week #05:   M 9/21 – **PHASE 1: Discovery** (instruction)
              W 9/23 – Discovery (application);

Week #06:   M 9/28 – Photo editing software instruction
              W 9/30 – Photo editing software exercise (user/product interface)

Week #07:   M 10/05 – **PHASE 2: Interpretation** (instruction)
              W 10/07 – Interpretation (application);

Week #08:   M 10/12 – **PHASE 3: Ideation** (instruction); Graphics software instruction
              W 10/14 – Ideation [Generation]; Graphics exercise (Ideation)

Week #09:   M 10/19 – Ideation [Selection]
              W 10/21 – Ideation [Refinement]

Week #10:   M 10/26 – **PHASE 4: Experimentation** (instruction)
              W 10/28 – Experimentation [Prototype]

Week #11:   M 11/02 – Experimentation [Prototype]; Layout software instruction
              W 11/04 – Experimentation [Prototype]; Layout software exercise (storyboard)

Week #12:   M 11/09 – Experimentation [Test]
              W 11/11 – [Veterans' Day]

Week #13:   M 11/16 – **PHASE 5: Evolution** (Revision)
              W 11/18 – Evolution; Storyboard Composition

Week #14:   M 11/23 – Storyboard Composition
              W 11/25 – Beta Project Presentations (product & storyboard)