MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
GMMD 337 – Design Thinking

Created by: Christopher Sweeney
Updated by: Christopher Sweeney

Canino School of Engineering Technology
Department: Decision and Graphic Media Systems
Semester/Year: Fall 2018
A. **TITLE**: Design Thinking

B. **COURSE NUMBER**: GMMD 337

C. **CREDIT HOURS**: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

   # Credit Hours: 3
   # Lecture Hours: 3 per week
   # Lab Hours: per week
   Other: per week

   Course Length: 15 Weeks

D. **WRITING INTENSIVE COURSE**: Yes ☑ No ☐

E. **GER CATEGORY**: None: ☐ Yes: GER

   If course satisfies more than one: GER

F. **SEMESTER(S) OFFERED**: Fall ☐ Spring ☐ Fall & Spring ☑

G. **COURSE DESCRIPTION**:

   This course develops innovative thinking skills related to “wicked” human-oriented problems. Students examine cases and propose resolutions following the five-stage design thinking process of Empathy, Define, Ideate, Prototype, and Test. Cases involve the development and implementation of new products, processes, and services.

H. **PRE-REQUISITES**: None ☐ Yes ☑ If yes, list below:

   Pre-requisite(s): ENGL 101 and GER 1 Math

   **CO-REQUISITES**: None ☐ Yes ☑ If yes, list below:
I. **STUDENT LEARNING OUTCOMES:** *(see key below)*

By the end of this course, the student will be able to:

<table>
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<tr>
<th>Course Student Learning Outcome [SLO]</th>
<th>Program Student Learning Outcome [PSLO]</th>
<th>GER [If Applicable]</th>
<th>ISLO &amp; SUBSETS</th>
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<tbody>
<tr>
<td>Discuss the role of design thinking in contemporary practice</td>
<td>Design Process</td>
<td>5-Ind, Prof, Disc, Know Skills ISLO ISLO</td>
<td>Subsets Subsets Subsets Subsets</td>
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<td>Identify the 5-stage design thinking process</td>
<td>Design Process</td>
<td>5-Ind, Prof, Disc, Know Skills ISLO ISLO</td>
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<td>Apply the 5-stage design thinking process to new products</td>
<td>Design Process</td>
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<td>Apply the 5-stage design thinking process to new services and processes</td>
<td>Design Process</td>
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<td>Demonstrate visual literacy and articulacy to explain design decisions</td>
<td>Interpretation</td>
<td>5-Ind, Prof, Disc, Know Skills ISLO ISLO</td>
<td>Subsets Subsets Subsets Subsets</td>
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*ISLO* and *ISLO & SUBSETS* columns indicate specific learning outcomes and their corresponding subsets.
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<td>ISLO &amp; Subsets</td>
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| 1 | Communication Skills  
Oral [O], Written [W] |
| 2 | Critical Thinking  
Critical Analysis [CA], Inquiry & Analysis [IA], Problem Solving [PS] |
| 3 | Foundational Skills  
Information Management [IM], Quantitative Lit./Reasoning [QTR] |
| 4 | Social Responsibility  
Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T] |
| 5 | Industry, Professional, Discipline Specific Knowledge and Skills |

*Include program objectives if applicable. Please consult with Program Coordinator*
J. **APPLIED LEARNING COMPONENT:** Yes ☒ No ☐

If YES, select one or more of the following categories:

- ☐ Classroom/Lab
- ☐ Internship
- ☐ Clinical Placement
- ☐ Practicum
- ☒ Service Learning
- ☐ Community Service
- ☐ Civic Engagement
- ☒ Creative Works/Senior Project
- ☐ Research
- ☐ Entrepreneurship
- (program, class, project)

K. **TEXTS:**


L. **REFERENCES:**


M. **EQUIPMENT:** None ☐ Needed: technology enhanced classroom

N. **GRADING METHOD:** A-F

O. **SUGGESTED MEASUREMENT CRITERIA/METHODS:**

- Exams
- Quizzes
- Discussion Boards
- Papers
- Projects

P. **DETAILED COURSE OUTLINE:**

**I. Entrepreneurship**
A. Global Perspectives
B. Practices
C. Developing Mindset
D. Social Entrepreneurship

**II. Opportunities**
A. Generating New Ideas
B. Using Design Thinking
C. Testing and Experimenting

**III. Design Thinking Tools**
A. Empathy
B. Define
C. Ideate
D. Prototype
E. Test

IV Evaluating Opportunities
   A. Building Business Models
   B. Planning
   C. Creating Revenue Models
   D. Learning from Failure

V. Case Studies

Q. LABORATORY OUTLINE:  None ☒  Yes ☐