Instructor: Gus Roque, M.S.  
Dept: Honors College  
Office Hours: By appointment, via web meeting. (skype: roquegus)  
E-mail: groque@fiu.edu

Course Description
This course will introduce you to the Design Thinking methodology for creating and innovating. However, the only way to learn Design Thinking is by doing Design Thinking. Therefore, this course will be light on theory and heavy in practice. During the first part of this course, you’ll be given a practice design challenge in order to learn the method, tools and principles of human-centered design in a “risk-free” way. Then, your mighty Innovation Department will be presented with a complex and poorly-bound problem (where most are not even sure where to start!). Now, you’ll have a chance to put your newly acquired Design Thinking chops to the test to attempt to solve.

Course Objectives (CO)
Upon successful completion of this course, students will be able to:
- Identify and understand human needs and opportunities using Design Thinking
- Generate ideas to solve for human needs and opportunities using Design Thinking
- Evaluate and prioritize ideas for development
- Design, storyboard, prototype and test ideas for feedback

Textbook

Optional: “Change by Design” by Tim Brown ($19 bucks or so).

Other readings and course materials will be provided within the course.

Supplies
For this course you’ll need:
- Post-it notes (3 in x 3 in)
- Black sharpies (don’t need a whole box, just one)
Mural Account

Collaborative whiteboard software. Free.

- Use my special invite link: https://app.mural.co/invitation/team/ld9473?code=69c18a7545ad44b7aa436e57fc412fc4&sender=groque7281
- Once registered, here’s the link to return to the workspace: https://app.mural.co/t/ld9473

Design Thinking is a Team Sport

Students will be placed in groups of up to 8 students. Your team should be communicating on a very regular basis, at least a few times a week. Setup a WhatsApp group. Meeting up and co-creating the tools is essential to gather diversity of thought. Creative abrasion will happen and that’s OK. Sometimes it works to disagree and view things from a different perspective. Meeting regularly via Zoom is highly encouraged.

Practice Design Challenge

“How might we create an amazing student experience for FIU Honors College students?”

Real Design Challenge

To be revealed...

Global Learning Outcomes (GL)

Upon successful completion of this course, students will be able to:

- GL1: Demonstrate knowledge of the interrelated global dynamics (social-cultural, political, economic, etc.) that shape aesthetics, values, and authority in diverse cultural contexts. (Global Awareness)
- GL2: Analyze the multiple global forces that shape their understanding of aesthetics, values, and authority — economic, political, sociological, technological, cultural, etc. (Global Perspectives)
- GL3: Develop solutions to local, global, international, and/or intercultural problems related to aesthetics, values, and authority. (Global Engagement)

Global Learning Medallion

The Excellence in Global Learning Medallion is an interactive, participatory program consisting of an extensive series of courses and activities designed to enhance your global awareness, global perspective, and attitude of global engagement. Participation in the GL Medallion program connects you to invaluable, high impact opportunities such as exclusive internships, student organizations focused on international and
intercultural issues, study abroad, and the opportunity to exchange ideas and network during roundtable discussions. To learn more and sign up, visit [http://goglobal.fiu.edu/medallion](http://goglobal.fiu.edu/medallion)

**Complimentary Access to NYTimes.com**
FIU is proud to provide complimentary access for the entire academic year to NYTimes.com to students, faculty, and staff. This digital access, available to every FIU community member, replaces the limited number of paper copies that were previously available on campus. To activate your access, please visit [http://goglobal.fiu.edu/accessnyt](http://goglobal.fiu.edu/accessnyt)

**Professor Roque’s Teaching Philosophy**
My goal as a teacher is to develop critical thinkers. I believe that:

- true learning never stops
- true learning comes from learning about yourself, by reflecting on your past and envisioning your future
- no one’s a true expert in anything; learners should challenge, probe, and question.

I will do my part if you do your part. I am personally invested in your success. I care that you learn.

**Fully Online Course Expectations**
This is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

Students are expected to:

- Review the how to get started information located in the course content
- Interact online with instructor/s and peers
- Review and follow the course calendar
- Log in to the course at least 4 times per week
- Respond to emails/messages within 5 days
- Submit assignments by the corresponding deadline

The instructor will:

- Log in to the course at least 4 times per week
- Respond to emails and messages within 3 days
- Grade assignments within 10 days of the assignment deadline

**Textbooks**
No textbook required. All readings and course materials will be provided within the course.

**Course Communication**
Communication in this course will take place via Canvas.

Messages is a private and secure text-based communication system which occurs within a course among its Course members. Users must log on to Canvas to send, receive, or read messages. It is recommended that students check their messages routinely to ensure up-to-date communication.
Visit our Writing Resources webpage for more information on professional writing and technical communication skills.

POLICIES AND PROCEDURES

Accommodation Policy
Every effort will be made, where feasible and practical, to accommodate students who are so challenged. Should you require accommodations, contact the Disability Resource Center (DRC), if you have not done so already.

Please note that if you have a student who is registered with the DRC, you will receive notification about the student’s disability and a detailed description of accommodations the student will require. Please visit our ADA Compliance webpage for information about accessibility involving the tools used in this course.

For additional assistance please contact FIU's Disability Resource Center.

Religious Holidays
Every effort will be made, where feasible and practical, to accommodate students whose religious practices coincide with class requirements scheduling. Please make sure to notify your instructor at the beginning of the semester of which dates you will be absent or any anticipated problems with completing course work.

Academic Integrity
Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook.

Academic Misconduct includes: Cheating – The unauthorized use of books, notes, aids, electronic sources; or assistance from another person with respect to examinations, course assignments, field service reports, class recitations; or the unauthorized possession of examination papers or course materials, whether originally authorized or not. Plagiarism – The use and appropriation of another’s work without any indication of the source and the representation of such work as the student’s own. Any student who fails to give credit for ideas, expressions or materials taken from another source, including internet sources, is responsible for plagiarism.

Learn more about the academic integrity policies and procedures as well as student resources that can help you prepare for a successful semester.

Policies
Please review the FIU's Policies webpage. The policies webpage contains essential information regarding guidelines relevant to all courses at FIU, as well as additional information about acceptable netiquette for online courses.
Honors College Requirements
Registration in this course implies an acceptance of and compliance with the Honors College policies for students and the FIU Code of Academic Integrity.

Honors Engagement Requirements
Beginning in Fall 2014, Honors College students are required to accumulate at least 20 citizenship points each academic year (Fall and Spring) by attending Honors College activities. Students attending only one semester (Fall or Spring) are required to accumulate 10 citizenship points. See http://honors.fiu.edu/current-students/citizenship/

Volunteer Service Hours
Honors College students must also complete 20 volunteer service hours. These hours DO NOT count toward the 20 engagement points discussed above. See http://honors.fiu.edu/current-students/community-service/

Student Portfolios
The Honors College will be using a portfolio method to assess students' learning outcomes. The portfolio allows for maximum flexibility in gauging student learning. Students decide (with instructor consultation) what “artifacts” or assignments to include for consideration in their portfolios to demonstrate successful achievement of each of five key student learning outcomes over the 4-year Honors experience. See http://honors.fiu.edu/students/honors-advising-center/portfolio-for-graduating-seniors/.

Honors Education in the ARTS (HEARTS)
The HEARTS program is designed to give Honors College students opportunities to “explore and appreciate different artistic and cultural traditions and modes of artistic expression. HEARTS will also serve as a clearinghouse (and curatorial framework) for our students to experience the arts on campus and in the community by providing them with information about cultural activities and access to performances with free or discounted tickets. See http://honors.fiu.edu/hearts/.

Honors College Academic Misconduct Statement
In The Honors College, the term “honor” refers both to academic accomplishment and character. Students in Honors should therefore adhere to and be held to the highest standards of personal academic accountability. Academic dishonesty in any form, including plagiarism, is antithetical to the very definition of being an Honors student at FIU. Consequently, an Honors College student found responsible for academic misconduct will be dismissed from the College.

Procedures and Penalties
An Honors faculty member may bring charges of academic misconduct against an Honors student if the faculty member suspects plagiarism or other forms of academic misconduct. The faculty member will decide whether to pursue informal resolution, file formal resolution charges, or take no further action, and will follow the Academic Misconduct procedures available at at https://studentaffairs.fiu.edu/get-support/student-conduct-and-conflict-resolution/academic-integrity/index.php

Please refer to the following documents for additional information:

FIU Code of Academic Integrity – http://integrity.fiu.edu/
Resources

Panthers Care & Counseling & Psychological Services

If you are looking for help for yourself or a fellow classmate, Panthers Care encourages you to express any concerns you may come across as it relates to any personal behavior concerns or worries you have, for the classmate’s well-being or yours; you are encouraged to share your concerns with FIU’s Panthers Care website.

Counseling and Psychological Services (CAPS) offers free and confidential help for anxiety, depression, stress, and other concerns that life brings. Learn more about CAPS at caps.fiu.edu. Professional counselors are available for same-day appointments. Don’t wait to call 305-348-2277 to set up a time to talk or visit the online self-help portal.

Technical Requirements & Skills

Students enrolled in online courses are expected to have moderate proficiency using a computer. Please go to the "What’s Required" webpage to find out more information on this subject.

This course utilizes the following tools:

1. Canvas (privacy policy and terms of use)
2. TED Talks (privacy policy and terms of use)

Please visit our Technical Requirements webpage for additional information.

Grading

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DESIGN BRIEF</strong> Understanding the problem and the objective</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>FIELD RESEARCH</strong> Identify pain points by interviewing and talking to real people</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>EMPATHY + PERSONA BUILDING</strong> Putting yourself in their shoes</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>JOURNEY MAPPING</strong> Build a story about person</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>REFRAME THE PROBLEM “How Might We”</strong></td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>IDEATION, EVALUATION AND SELECTION</strong> Ideate 3 different ways. Pick the best idea and move forward.</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
<tr>
<td><strong>STORYBOARD + PROTOTYPE DEVELOPMENT</strong> Plan your idea, then make it come to life.</td>
<td>(5 points for Practice Challenge, 5 points for Real Challenge)</td>
</tr>
</tbody>
</table>
## Assignments

Work that is late will lose 1 point for each day that it is late.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FINAL PRESENTATION</strong></td>
<td>Tell, don’t sell. Be open to feedback</td>
</tr>
<tr>
<td><strong>PEER FEEDBACK (via iPEER tool)</strong></td>
<td>10 points for 1st session. 10 points for 2nd session. Your peers will determine 20% of your grade.</td>
</tr>
<tr>
<td><strong>Assignments</strong></td>
<td>Work that is late will lose 1 point for each day that it is late.</td>
</tr>
</tbody>
</table>

**DESIGN BRIEF (5 points for Practice Challenge, 5 points for Real Challenge):** Understanding the problem and the objective

Your team will prepare a one-page (maximum) brief on the design challenge at-hand. This is your “Plan” phase document. Discuss the following:

- What is the challenge?
- What are the dimensions of the challenge? [Who, What, When, Why]
- Who is the stakeholder?
- When is this happening?
- Why is this important to address (for the stakeholder)?
- Why is this important to address (for the organization)?

**FIELD RESEARCH (5 points for Practice Challenge, 5 points for Real Challenge):** Identify pain points by interviewing and talking to real people

Your team will prepare the following:

- a one-page (maximum) summary of the results of your field research (who did you talk to? What were some key themes (pain points) that emerged? - each member of the group must interview at least 1 person

**EMPATHY + PERSONA BUILDING (5 points for Practice Challenge, 5 points for Real Challenge):** Putting yourself in their shoes

Your team will prepare the following:

- A completed Empathy Map
- A completed Stakeholder Map
- A completed Persona Card

**JOURNEY MAPPING (5 points for Practice Challenge, 5 points for Real Challenge):** Build a story about person

Your team will prepare the following:

- A completed Customer Journey Map
<table>
<thead>
<tr>
<th>REFRAME THE PROBLEM (5 points for Practice Challenge, 5 points for Real Challenge): “How Might We”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your team will prepare the following:</td>
</tr>
<tr>
<td>● A completed How Might We Card</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IDEATION, IDEA EVALUATION AND SELECTION (5 points for Practice Challenge, 5 points for Real Challenge): Ideate 3 different ways, then time to pick the best idea and move forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your team will prepare the following:</td>
</tr>
<tr>
<td>● First Burst</td>
</tr>
<tr>
<td>● ABC Avalanche</td>
</tr>
<tr>
<td>● Think Wrong</td>
</tr>
<tr>
<td>● An idea card from each group member</td>
</tr>
<tr>
<td>● The “winning” idea card</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STORYBOARD + PROTOTYPE DEVELOPMENT (5 points for Practice Challenge, 5 points for Real Challenge): Plan your idea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your team will prepare the following:</td>
</tr>
<tr>
<td>● A completed Storyboard of your idea.</td>
</tr>
<tr>
<td>● A completed prototype of the winning idea. (Prototypes can be 2D or 3D).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FINAL PRESENTATION (10 points): Tell, don’t sell. Be open to feedback</th>
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<tbody>
<tr>
<td>Your team will prepare the following:</td>
</tr>
<tr>
<td>● A group presentation on your entire Design Thinking Journey. This can be done via a zoom recorded session with all team members. Max presentation time: 15 minutes.</td>
</tr>
<tr>
<td>○ Show us, from the start, how your group used Design Thinking. Walk us through the Double-Diamond and how you got to your idea.</td>
</tr>
<tr>
<td>○ Other notes: Tell, don’t sell! Don’t sell on your perfect idea. I’m looking for how the group worked the design thinking process. PowerPoint slides are OK to use, but walking through the tools used and how you reached your idea is what’s important.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEER FEEDBACK (via iPEER tool) (20 points): Your design team members will determine 20% of your grade.</th>
</tr>
</thead>
<tbody>
<tr>
<td>We will be using the iPeer tool to provide feedback and a grade for your fellow design team members.</td>
</tr>
<tr>
<td>● 10 points for 1st session.</td>
</tr>
<tr>
<td>● 10 points for 2nd session.</td>
</tr>
<tr>
<td>● Your peers will determine 20% of your grade. Be good to each other!</td>
</tr>
</tbody>
</table>
Letter Grade

<table>
<thead>
<tr>
<th>Letter</th>
<th>Range</th>
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<th>Range</th>
<th>Letter</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Above 93</td>
<td>B-</td>
<td>81-83</td>
<td>F</td>
<td>&lt; 61</td>
</tr>
<tr>
<td>A-</td>
<td>90 - 92</td>
<td>C+</td>
<td>76 - 80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>87 - 89</td>
<td>C</td>
<td>70 - 75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>84 - 86</td>
<td>D</td>
<td>61 - 69</td>
<td></td>
<td></td>
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</tbody>
</table>

Course Calendar

Some dates/times may be changed, if necessary, with advanced notice.

The instructor reserves the right to make content and schedule changes as deemed necessary and appropriate at any time during the academic semester.

<table>
<thead>
<tr>
<th>Week</th>
<th>Module</th>
<th>Topics Covered</th>
<th>Action Items for You</th>
</tr>
</thead>
</table>
| 1 (Jan 9) | Introduction | ● What is Design Thinking?  
 ● The Double Diamond  
 ● Collaborating Virtually  
 ● Practice Design Challenge presented | ❑ Read the syllabus  
 ❑ **Introduce yourself via MURAL**  
 ❑ Sign-up for a group  
 ❑ Meet with your group |
| 2 (Jan 16) | Design Brief and Conducting Field Research | ● Design Brief  
 ● How to conduct field research  
 ● Desk vs field research  
 ● Beginner's Mind  
 ● Conduct interviews | ❑ **Design Brief (5 points)**  
 ❑ Conduct field research interviews |
| 3 (Jan 23) | Data Download & Research Sense-making | ● Continue interviewing  
 ● Notes on your notes  
 ● Affinity Mapping as a group | ❑ Affinity Mapping on MURAL  
 ❑ **Field Research (5 points)** |
| 4 (Jan 30) | Empathy Mapping / Stakeholder Map | ● Empathy Map (your first tool!)  
 ● Stakeholder Map | ❑ **Empathy + Persona Building (5 points)** |
| 5 (Feb 6) | Persona | ● Build **Persona Card** | ❑ Journey Mapping (5 points) |
| 6 (Feb 13) | Journey Mapping | ● Create **Journey Map** | ❑ Reframe The Problem (5 points) |
| 7 (Feb 20) | Reframe / Ideation | ● “How Might We” card  
 ● Start of **Ideation** | ❑ |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Activities</th>
<th>Points</th>
</tr>
</thead>
</table>
| 8 (Feb 27) | Idea Selection + Storyboarding + Prototyping | - Narrow ideas down to 5, select 1 to move forward with  
- **Storyboard tool**  
- **Prototype** and present idea | Ideation, Evaluation and Selection (5 points)  
Storyboard + Prototype Development (5 points) |
| 9 (Mar 6) | Global Challenge Presented               | - Real Design Challenge presented  
- Respond to Real Design Challenge via Design Brief | Design Brief (5 points) |
| 10 (Mar 13) | Field Research + Data Download            | - How to conduct field research  
- Desk vs field research  
- Beginner's Mind  
- Conduct interviews  
- Notes on your notes  
- Affinity Mapping | Field Research (5 points)  
Evaluate your Design Team members (10 points) |
| 11 (Mar 20) | Empathy Mapping / Stakeholder Map         | - Create **Empathy Map**  
- Create **Stakeholder Map** |  |
| 12 (Mar 27) | Persona                                 | - Build **Persona Card** | Empathy + Persona Building (5 points) |
| 13 (Apr 3) | Journey Mapping                         | - Create **Journey Map** | Journey Mapping (5 points) |
| 14 (Apr 10) | Reframe / Ideation                      | - “How Might We” card  
- Start of **Ideation** - create 100 ideas | Reframe The Problem (5 points) |
| 15 (Apr 17) | Idea Selection + Storyboarding + Prototyping | - Narrow ideas down to 5, select 1 to move forward with  
- **Storyboard tool**  
- **Prototype** and present idea | Ideation, Evaluation and Selection (5 points)  
Storyboard + Prototype Development (5 points)  
Final Presentation (10 points)  
Evaluate your Design Team members (10 points) |

END OF “PRACTICE” CHALLENGE.  
WE MOVE INTO “REAL” DESIGN CHALLENGE.
References