Design Inquiry and Research

General Information

<table>
<thead>
<tr>
<th>MBA Program</th>
<th>Course number</th>
<th>MIS 5403 sec 402</th>
<th>Credit hours</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course dates and times</td>
<td>T 6:00-8:30 Oct 14 – Dec 2</td>
<td>Course location</td>
<td>TUCC 1515 Market St / Rm 620</td>
</tr>
</tbody>
</table>

Instructor Information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>James Moustafellos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>204-4386 (office)</td>
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<tr>
<td>Email</td>
<td><a href="mailto:jamescm@temple.edu">jamescm@temple.edu</a></td>
</tr>
<tr>
<td>Office Location</td>
<td>209f Speakman</td>
</tr>
<tr>
<td>Office Hours</td>
<td>Tuesday and Thursday 11:00-1:00 or by appointment</td>
</tr>
</tbody>
</table>

The preferred method of contact is email

Competency Prerequisites/Co-requisites

| Prerequisite Competencies | None |
| Co-requisite Competencies | None |
| Other preparation required or recommended | |

Course Overview

This course forms a foundation of approaches, skills and working methods to be applied throughout the MBA experience. It is less about a distinct subject and more about how to effectively meet the business challenges of a rapidly changing, technologically driven global world.

This course introduces the concept of Business Design, a holistic approach to management that combines the analytical strengths of traditional business education with the qualitative research, idea generation and the ability to synthesize information from design education. It is a balance of quantitative and qualitative thinking.

Design Inquiry is a question-based framework to structure this problem solving process to create innovative solutions that are user-centered, socially, culturally and functionally meaningful and economically sustainable.

The following are five behavioral indicators of Design Inquiry. They are the course level objectives and outcomes:

1. **Sensory approach to problem solving:** Demonstrate an ability to approach complex problem solving experientially by mobilizing all sensory devices of the problem solver.
   - Think through visual means (diagram, map, draw and produce visual images)
• Rely upon tacit knowing
• Apply an aesthetic and holistic assessment of alternatives

2. **Open-ended approach to problem solving:** Demonstrate an ability to approach complex problem solving through exploration without predisposed solutions
   • Engage uncertainty and accept risk
   • Avoid premature closure through iterations
   • Enjoy improvisation
   • Embrace change
   • Discover unexpected outcomes

3. **Empathic approach to problem solving:** Demonstrate an ability to approach complex problem through understanding others
   • Focus on the human side
   • Empathize with customers
   • Engage in deep (authentic) listening
   • Consider hidden stakeholders
   • Discover unmet needs

4. **Multi-dimensional approach to problem solving:** Employ multiple perspectives and productively deal with conflicts and paradox
   • Entertain multiple alternatives with different models
   • See the whole
   • Engage in analytic-synthetic loops
   • Reconcile conflicting objectives

5. **Making ideas and solutions physical:** Translate concepts and ideas into life
   • Prototype
   • Role play
   • Use scenarios
   • Construct personas

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**Competency Map**

<table>
<thead>
<tr>
<th>MBA Learning Goal</th>
<th>Competency</th>
<th>Skill</th>
<th>Competency Measurement or Demonstration</th>
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<tbody>
<tr>
<td><strong>Learning Goal</strong></td>
<td><strong>(Primary) Influential Communication</strong> [See course level objective 3]</td>
<td>Active listening</td>
<td>Demonstrated through research interviews and the ability to synthesize stakeholder input and needs into final proposals. Demonstrated in project teamwork and ability to listen and hear ideas and contributions of team members. Measured through peer evaluations.</td>
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<tr>
<td></td>
<td><strong>(Primary) Influential Communication</strong> [See course level objective 3]</td>
<td>Written and oral communication</td>
<td>Measured through quality of written narratives of stakeholder interviews and observations Demonstrated through ability to convey research and ideas to team members and classmates</td>
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### (Primary) Influential Communication
[See course level objectives 1 and 5]

| Visual communication | Measured through the quality of visual representations created to communicate complex relationships, sequences, processes and concepts. Demonstrated through effective use of visual techniques within team process and presentations. |

### (Primary) Influential Communication
[See course level objective 5]

| Presentation skills | Demonstrated through team’s ability to construct and convey a logical, complete and compelling story around project proposal. |

### (Primary) Business Reasoning
[See course level objectives 2 and 4]

| Identify Sources of Relevant Information and Data for Problem Scenario | Demonstrated through the ability to compile relevant information from multiple, varied and unexpected sources. |

### (Primary) Business Reasoning
[See course level objectives 2 and 1]

| Visualization: Communicating message through imagery | Demonstrated through the use of visual means throughout the design process and the inclusion of effective visual representations in the final proposal. |

### (Primary) Business Reasoning
[See course level objectives 2 and 4]

| Draw from Conceptual and Real-World Events to Propose Solutions/Changes to Business Strategies | Demonstrated through how effectively the insights derived from research are translated into innovative proposals. |

### (Primary) Business Reasoning
[See course level objectives 1, 3 and 4]

| Articulate Holistic, Multi-Perspective View of Business | Demonstrated through the number of stakeholders considered (including internal, external and hidden stakeholders), the personas developed, and how well their potentially conflicting needs are resolved in the project proposal. |

### Learning Goal
(Secondary) Leadership

| Assuming a leadership role in team settings | Measured through peer evaluations. |

### (Secondary) Identify and Evaluate Business Opportunities

| Opportunity recognition and screening | Demonstrated through the identification of unmet stakeholder needs how well they are translated into viable proposals. |

## Teaching Methods

This course uses a studio-based format to emphasize experiential learning through hands-on engagement of ideas and concepts. The course format includes brief lectures and presentations, discussions and active learning workshops. Individual work and teamwork are combined to allow students to engage projects through personal and collaborative explorations.
Qualitative research based upon ethnography complements the more traditional prioritization of quantitative analysis in management education. Ethnographic research is based on fieldwork, observing people in their natural settings and immersing oneself in the research context. Research methods include: observing, interviewing (descriptive, semi-structured and structured), conducting archival or secondary research, and collecting and reading cultural artifacts. An ethnographic approach to research is an open-ended emergent learning process that is holistic, flexible, creative, interpretive, iterative and includes discovery. These skills are essential to achieving the competencies listed above and influence achievement of many other competencies including: Implementation Management, Cross-Cultural Effectiveness, and Ethical Management.

Course Materials

Required

Required readings are listed in the course schedule.

Recommended

The following articles and books are supplementary materials for those who are interested in learning more about this topic:


Martin R and Austen H, The Art of Integrative Thinking, Rotman Management, Fall 1999

Stickdom M and Schneider J, This is Service Designing: Basics, Tools, Thinking, BIS Publishers, Amsterdam, 2010

ISBN: 978-90-6369-256-8

Below are additional books and references:

• Change by Design, by Tim Brown
• Design-Driven Innovation, by Roberto Verganti
• Designing Interactions, by Bill Moggridge
• How Designers Think: The Design Process Demystified, by Brian Lawson
• Designing Design, by Kenya Hara

summary from http://methodsofdiscovery.net/?q=node/19 accessed 11 January 2014 at 1:24 pm and
Course Schedule

Due to the ambiguous and exploratory nature of UNSTRUCTURED research projects, the following course schedule, readings and assignments may change to respond to student progress and needs as the project evolves. Any changes will be announced in class.

14 October  Class 1: Introduction to Business Design and Design Inquiry Part 1

*An approach to working, understanding and envisioning*
- [course overview]
- Introduction to Business Design/Design Inquiry and their relevance to MBA education
- Team building
- What is Design?
- Foundations of working methods
- Introduction of Challenge topic

Readings due: “The 10 Faces of Innovation”

Assignment given: Research the Challenge topic and write a 1-page summary of your findings. Answer the questions:

- “What are alternative economies?”
- “What are underground markets?”
- How do these markets and economies operate? Provide specific examples.

21 October  Class 2: Introduction to Business Design and Design Inquiry Part 2

*An approach to:*
- Design process
- Iterations
- Analytic-synthetic loops
- Authentic listening
- Thinking through visual means
- Discovering unexpected outcomes
- Collaborative working methods

Readings due: Boland and Collopy, Managing as Designing: Design Matters for Management

Lecture: View the “Market Forces” lecture given earlier this semester by our client, Stephanie Syjuco
[http://tucapture.fox.temple.edu/Mediasite/Play/79cf8c01429844cd9784cb552d2a5d471d](http://tucapture.fox.temple.edu/Mediasite/Play/79cf8c01429844cd9784cb552d2a5d471d)

Assignment due: Individual research summary on the Challenge topic

Assignment given: Individually assemble a research portfolio of as much information you can find on the Challenge project.

- Take a minimum of 20 photographs
- Record a minimum of 3 videos of 3 minutes each
- Keep a journal of observations
28 October  **Class 3: Research Methods Part 1**

*All you can do to understand a situation and its context and stakeholders*
- Assembling a personal repository of tools for research and data collection
- Defining a strategy for researching your project
- Teamwork to assess the information collected and to develop a formal research plan for your project: *What do you have? What do you need? What is missing?*

Readings due: “Informing our Intuition: Design Research for Radical Innovation”

Assignment due: Individual research documentation on the Challenge project

Assignment given:
- Individually interview at least 3 people and write a 1-page narrative for each.

4 November  **Class 4: Research Methods Part 2**

- *All you can do to understand a situation and its stakeholders*
- Understanding the power of people and stories
- Developing personas
- Discovering unmet needs
- Mapping
- [Possible meeting with Tyler Printmaking students: TBD]


Assignment due: Individual interview narratives.

Assignments given: Individually prepare a visual representation of your underground market as a system. Use Powerpoint to create your representation. You may use any animations or effects to communicate your idea – but you may only use 1 slide.

Conduct any additional research to understand you persona’s unmet needs and fill any gaps in the general research identified by the team.

11 November  **Class 5: Analysis + Synthesis**

- *Making sense of information*
- Bringing it all together
- Workshop to analyze collected materials and synthesize them into potential solutions
- Brainstorming
- Team members will share visual representations and create a consolidated system representation.
- Class concludes with a plan for a project presentation and strategies for documenting and communicating your research.

Readings due: “Using Customer Journey Maps to Improve Customer Experience”
“7 Tips on Better Brainstorming”
https://openideo.com/blog/seven-tips-on-better-brainstorming

Brainstorming Doesn’t Work: Try This Technique Instead

Assignment due: Individual Powerpoint representation of your underground market as a system. Additional research on the persona’s unmet needs and any gaps in the research identified by the team.

Assignment given: Teams will prepare a formal project research presentation.

18 November  Class 6: Presentations of research [CLASS WILL MEET ON MAIN CAMPUS]

- Teams publicly present their research to the client and outside guests.

Readings due: http://firstround.com/article/This-Advice-From-IDEOs-Nicole-Kahn-Will-Transform-the-Way-You-Give-Presentations

Assignment given: Teams will synthesize criticism, include suggestions and refine proposals for final submission.

[19-21 November  CHALLENGE PROJECT PARTICIPATION]

Students are required to participate in the class project to apply the research methods and tools in a real world setting by working with the client. The Challenge will not be during standard class time and students are required to arrange their schedule to attend and participate. The dates are November 19-21 and students will be required to attend 1 of these days for a minimum of 2.5 hours. In exchange for your time, we will not meet on December 2\textsuperscript{nd}.

2 December  Class 7: Final Deliverables due

- We will not formally meet on this day in exchange for your time at the Challenge.
- Teams will submit hard copies of their final reports by 5:00 to the MIS Administrative Assistant in 210 Speakman Hall.
- Teams will submit consensus grades for each team member in writing with an explanation.
Policies & Procedures

Grading Policy

The final grade for the course will be determined as follows:

- Class participation: 10%
- Individual research assignments (4): 40%
- Group design workshops: 30%
- Final project report: 20%

Teams will be given grades for the design workshop projects and the portfolio. These team grades will be on the following scale: Pass High (90), Pass (80), Pass Low (70), Fail (60).

During the course, team members will provide interim grades for their peers at the end of weeks 2 and 4. These interim grades provide early feedback and assessment of each student’s performance as perceived by their peers. At the end of the course, each team will meet to discuss individual team grades and will submit a written team consensus grading report on grades for each individual team member and an explanation for the grade given.

Individual grades for group work will be adjusted up to 10 points above or below the team grade to reflect each student’s individual contribution to the team. Adjustments will be based upon the instructor’s and peer evaluations.

The final course grade uses the letter grades A-F.

<table>
<thead>
<tr>
<th>Scale</th>
<th>A</th>
<th>73 – 76</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>94 – 100</td>
<td>A</td>
<td>73 – 76</td>
<td>C</td>
</tr>
<tr>
<td>90 – 93</td>
<td>A-</td>
<td>70 – 72</td>
<td>C-</td>
</tr>
<tr>
<td>87 – 89</td>
<td>B+</td>
<td>67 – 69</td>
<td>D+</td>
</tr>
<tr>
<td>83 – 86</td>
<td>B</td>
<td>63 – 66</td>
<td>D</td>
</tr>
<tr>
<td>80 – 82</td>
<td>B-</td>
<td>60 – 62</td>
<td>D-</td>
</tr>
<tr>
<td>77 – 79</td>
<td>C+</td>
<td>Below 60</td>
<td>F</td>
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Class participation: The course will be conducted primarily as a discussion and activity-based class. Students are expected to be fully engaged and participate in the discussion and activities and to contribute to the process of constructing knowledge. The class participation grade will reflect the instructor’s judgment of the quality and quantity of a student’s contribution during class sessions.

Criteria for the class participation grade include attendance, punctuality, level of preparation, professionalism, and the ability to answer questions, discuss readings, and contribute to group activities.
- Attendance for the class sessions is mandatory. Given the intense nature of the workshops and the importance of group interaction, it is not possible to replicate the experience or make up the work missed.
- Tardiness disrupts the flow of class activities and often leads to having to repeat announcements or instructions. Entering and leaving the room during the class similarly distracts both students and the instructor and conveys a disregard for the material being discussed.
- You are expected to complete all assignments and study the assigned course readings for a given day before coming to class. Students will be called upon to present research or to discuss issues covered in the assigned readings. You are encouraged to engage in critical thinking and to challenge ideas without showing disrespect for the ideas of others.
- Effective participation has much more to do with the quality than with the quantity of your interaction.

Individual Assignments: These assignments are a documentation of your individual research conducted in preparation for the group projects. The goal of these assignments is to facilitate discussion and group work in the class. **Since these assignments are essential for your group projects, no assignments will be accepted after the start of class on the date due. Late assignments will receive a 0 credit.** Please bring 2 printed copies of your assignments – 1 to turn in and 1 to use with your team. Assignments must follow the format below.

**Individual Learning Assignments REQUIRED FORMAT:** All writing assignments for the course should conform to the following format requirements: 11-point Times Roman, double-space, and one inch margin all around. Papers should be 1 FULL PAGE minimum and up to 2 pages maximum. This format is to help you understand the required length of your assignments in order to have sufficient content. Papers that violate the format requirement will be penalized.

**Interviews:** The interview assignments are opportunities to understand the relationship between PEOPLE and situations. Your goal is to understand what people want and need. Successful interview assignments usually involve multiple interviews and several pages of transcribed conversation that is then summarized and distilled into a meaningful narrative. If your interview is very brief or cut short – I strongly suggest doing another until you have enough material.

**Plagiarism Policy**

Plagiarism and academic dishonesty can take many forms. The most obvious is copying from another student’s exam, but the following are also forms of this:

- Copying material directly from the Internet (or another source) without a proper citation crediting the author
- Turning in an assignment from a previous semester as if it were your own
- Having someone else complete your lab assignment and submitting it as if it were your own
- Signing someone else’s name to an attendance sign-in sheet
- Use of assignments completed in one class as any part of a project assigned in another class
- Sharing/copying homework assignments.
- Use of unauthorized notes during an examination
• In cases of cheating, both parties will be held **equally responsible**, i.e. both the student who shares the work and the student who copies the work.

Of course, behavior like this will not be tolerated in this class. Penalties for such actions are given at my discretion, and can range from a failing grade for the individual assignment, to a failing grade for the entire course.

If you use text, figures, and data in reports that was created by others you must identify the source and clearly differentiate your work from the material that you are referencing. If you fail to do so you are plagiarizing. There are many different acceptable formats that you can use to cite the work of others (see some of the resources below). The formats are not as important as the intent. You must clearly show the reader what is your work and what is a reference to somebody else’s work.

Plagiarism is a serious offence and could lead to reduced or failing grades and/or expulsion from the university. The Temple University Student Code of Conduct specifically prohibits plagiarism (see [http://www.temple.edu/assistance/udc/coc.htm](http://www.temple.edu/assistance/udc/coc.htm)).

The following excerpt defines plagiarism:

> Plagiarism is the unacknowledged use of another person’s labor, ideas, words, or assistance. Normally, all work done for courses – papers, examinations, homework exercises, laboratory reports, oral presentations – is expected to be the individual effort of the student presenting the work. There are many forms of plagiarism: repeating another person’s sentence as your own, adopting a particularly apt phrase as your own, paraphrasing someone else’s argument as your own, or even presenting someone else’s line of thinking in the development of a thesis as though it were your own. All these forms of plagiarism are prohibited both by the traditional principles of academic honesty and by the regulations of Temple University. Our education and our research encourage us to explore and use the ideas of others, and as writers we will frequently want to use the ideas and even the words of others. It is perfectly acceptable to do so; but we must never submit someone else’s work as if it were our own, rather we must give appropriate credit to the originator.


For a more detailed description of plagiarism:

Princeton University Writing Center on Plagiarism:
[http://web.princeton.edu/sites/writing/Writing_Center/WCWritingRes.htm](http://web.princeton.edu/sites/writing/Writing_Center/WCWritingRes.htm)

How to successfully quote and reference material:

University of Wisconsin Writers Handbook
[http://www.wisc.edu/writing/Handbook/QuotingSources.html](http://www.wisc.edu/writing/Handbook/QuotingSources.html)

How to cite electronic sources:

Electronic Reference Formats Recommended by the American Psychological Association
[http://www.apastyle.org/elecmmedia.html](http://www.apastyle.org/elecmmedia.html)

References and Resources
Temple University Student Code of Conduct
http://www.temple.edu/assistance/udc/coc.htm

Temple University Writing Center
http://www.temple.edu/writingctr/

Temple University Graduate Bulletin, 2000-2001
http://www.temple.edu/gradbulletin

Disabilities Disclosure Statement
Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215 204 1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities.

Student and Faculty Rights and Responsibilities
Freedom to teach and learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty and Academic Rights and Responsibilities (Policy #03.70.02) which can be accessed through the following link:
http://policies.temple.edu/getdoc.asp?policy_no=03.70.02.

Student Concerns Guidelines
The Grievance Procedure is available on the Fox Web Site
http://www.fox.temple.edu/cms_academics/dept/advising/students/grievance-procedures/