DSMBA 640: Strategic Foresight
Spring 2015 (3 Credits)

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Course Description:

> *Predicting the future is a hopeless, thankless task, with ridicule to begin with and, all too often, scorn to end with.*
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> —Isaac Asimov (written in 1965)

The future is not some fixed point on the horizon that we are all hurdling towards helpless to do anything about it. Predicting the future is a hopeless, thankless task…just as Isaac Asimov. Predictions are intellectually dishonest. They assume that tomorrow is fixed and do not comprehend the complexity of future events.

The future is built everyday by the actions of people and even if we shouldn't even try to predict the future, having an understanding of the futures we want and the futures we want to avoid is essential. Regardless of your field, understanding the future, exploring it and discussing it will be important for your success.

This course explores the history, theory and tools needed to engage in professional foresight. Over five intensive residencies, you will be introduced to the work of a wide variety of futurists, examining and discussing what they got right and what they got wrong. We will study and use the practical tools of futures thinking: the language, theories, and methods of strategic foresight (a.k.a. futures studies). These will equip you with the concepts and skills necessary to help navigate a volatile world, managing risks and seizing opportunities that others might miss. The ultimate goal of the course is for you to begin using foresight, futurism and strategic long term thinking immediately in your professional life.

Course Objectives and Learning Outcomes:

The prime objective of the Strategic Foresight course is to enable students to acquire the basics, with a view to eventual fluency in its theories, and fitness in its practices. This is part of an ongoing anticipation or futuring process which will continue to develop and be applied throughout their professional lives.

This is not a quantitative methods class (statistical analysis methods are widely available elsewhere) but a course oriented to activating the critical, catalytic role that foresightful individuals and groups can play within their organizations and communities. It encourages striving for the necessary balance between deep understanding and effective implementation. An emphasis is placed on *the invention and pursuit of preferred futures*. Visionary people and organizations are never simply manufactured according to a recipe, but this course aims to draw out the interests and potentials in this direction that each student brings to the table. In short, it offers a sort of boot camp for world changers and culture evolvers to complement and enrich skills acquired previously and concurrently in the MBA program.

Learning will take place through faculty and guest lectures; reading and multimedia assignments; creative and analytical responses to course materials; supportive and constructive feedback; discussions in the classroom and online; individual and group presentations; hands-on activities; and review and reinforcement of critical knowledge and skills.

Course Objectives

- To introduce the primary concepts and theories of futures studies and applied foresight.
- To enable the serial and parallel adoption of multiple perspectives, including unorthodox and counterintuitive views, of unfolding change at multiple levels of analysis.
- To develop a capacity for identification of and timely strategic responses to trends and emerging issues.
- To integrate, recognize, build upon and finally move beyond assumptions and attitudes towards the future instilled by traditional education, cultural convention and personal habit.
- To cultivate a reflex of innovative engagement with social, political and institutional change.
- To teach a flexible and reliable process of inquiry that enables students to engage in continual anticipation, learning and adjustment in changing business environments.
- To support systematic and creative problem-solving, risk-management and opportunity-creation in both individual and team settings.
- To encourage a design-inflected and pragmatic, impact-oriented approach to communication that honours mastery of oral, written or other applicable conventions, while rewarding appropriate experimentation.
- To build experience and confidence in an array of foresight methods and corresponding methodologies, and to kindle a lifelong interest in the further development of these skills.

Learning Outcomes of the MBA in Design Strategy Program

Primary Learning Objectives:

Critical Analysis Skills
Students will learn to analyze products from a variety of trend and business criteria and attain a beginning level of familiarity with the sales and marketing contexts that are pertinent to their design applications. Students are required to perform deep analysis of project context, customer needs, competitive landscape, and are critiqued on the quality of their solutions to address these issues. Students demonstrate an ability to integrate multiple, competing issues while developing a unique, creative solution that balances many factors. Students demonstrate an ability to intelligently describe these challenges and how their solutions address them.

Interdisciplinary Methods
Students will use a variety of processes from several disciplines (including product design, communications, management fundamentals, materials engineering, and financial and social assessment frameworks) to develop real world solutions. Readings build on varied student experience to describe and use multi-disciplinary perspectives in development process. These are evaluated with feedback and graded throughout class. Students develop a plan that reflects the many disciplines required to develop a solution, including marketing, engineering, customer service, leadership, clients, and customer contact.

Professional Development Methods
Students will develop professional communication and group management skills within the context of two team projects. All students will take part in preparing reports and other deliverables to a professional level, participate in all presentations (even for group projects), and cultivate a high level of presentation confidence. Students will receive feedback on their presentation skills as well as the content of their presentations.

Research Skills
Class projects will require innovative research skills to find and develop new solutions. These skills will apply to customers and markets as well as materials, manufacturing, and product life-cycle data. 2 project challenges require customer and market research, competitive analysis, and economic impact report. These are evaluated by professors and external critiquers, with feedback, in presentations and reports, and graded. Students demonstrate an ability to research customer needs and desires while making clear their own biases beforehand and demonstrating how they overcome these biases in their research.

Collaboration Skills
Most of the projects in this class will be team-based, requiring extensive interaction in accommodating various personality differences and managing the range of creative confidences. Additionally, students may be exposed to individuals from various companies and organizations, in which they will have to interact diplomatically and effectively. Team assessments will be used to quantify and qualify team issues throughout the class. Emphasis will be placed on team interaction and individual contribution over the final project solutions themselves. Two team projects requiring shared deliverables and high-performance interaction. Students demonstrate the use of collaborative language and actions in meeting deadlines and contribute to all aspects of each deliverable. Students rate each others' performance after each project.

Discipline-Specific Techniques Skills

Readings, projects, reports, and feedback focuses on design and development processes, service design, experience design, and form development in the context of innovation. Students demonstrate understanding for process steps and order by documenting complete and detailed actions in their reports.

Understanding: Visual Literacy
Team projects and weekly design assignments require students to sketch and prototype rapidly. These are graded weekly. Students demonstrate courage in using a variety of visual media, despite lack of experience (in many cases). Students show improvement in sketching and rendering skills throughout the semester.

Meaning and Value Creation Understanding
Project solutions will be judged not only on their market and business validity but also on their value, innovation, and meaning to their intended customers and audiences. Introduction to meaning tools, evaluation and grading of these in project development and reports. Students adequately create Meaning strategies and demonstrate understanding of these strategies in the design choices they make (triggers) within their projects.

Creativity and Critical Thinking Skills
All of the projects in this class will require innovative and dynamic problem solving initiatives. Project outcomes must demonstrate confident approaches with relevant and thought provoking solutions. Regular evaluation and critique (by professor and external guests) of original, creative solutions to project challenges. Written and oral feedback. Students are critiqued on the originality and creativity of their proposed solutions, their progress throughout the course in developing and iterating prototypes, and their ability to reflect on critique deeply.

Secondary Learning Objectives:

Oral Communication Skills
Through two graded & critiqued presentations, students' abilities are evaluated in clearly and concisely prioritize their thoughts, and present loudly and clearly coherent points within the time allotted. All students are able to adequately answer critique questions with deeper details while still prioritizing relevant information.

Written Communication Skills
Four written project reports, weekly discussion postings, and final deliverables will require students to clearly and concisely prioritize their development and describe coherently their learnings. Students are able to adequately separate summaries from details and use appendixes for supporting material. Students are able to clearly and concisely communicate their ideas in weekly postings about the readings, contribute original analysis, and respond to each other's postings interactively in order to build a conversation (not merely a set of singular points).

Visual Communication Skills
A design journal is required throughout the course and is due at the end. In addition, prototypes and visual presentations are critiqued throughout the class, based on clear, concise visual communication. Students show competency and improvement in using visual tools and techniques in their sketches, presentations, and prototypes.

Leadership Skills
Students will be required to take turns leading their teams as well as demonstrate that they understand the fundamentals of leading (sustainable) change within organizations. Project deliverables, such as project summaries and sustainable return on investment

calculations allow students to demonstrate how they form and support arguments outlining sustainable benefits of their solutions.

Evaluation and Grading:

Strategic Foresight is a 3-credit course. Students can expect to spend approximately 5-6 hours a week on average in completing assignments in reading, group projects, and online discussion and interaction. Due to the timing of the course some weeks are more intensively loaded than others, and students will be fully responsible for meeting course expectations on time and to standard. Any difficulties that arise in meeting these requirements should be brought to the instructors' attention in advance in the interest of minimal disruption.

The grading range for the course is A-F, with weighting as follows:

Individual Classroom Participation & Attendance	15 pts. 15%
Individual Online Participation	15 pts. 15%
"Foresight History" Assignment and Collaboration	20 pts. 10%
"Classic Foresight" Assignment and Collaboration	20 pts. 30%
Science Fiction Prototype	15 pts. 15%
Final Presentation	15 pts. 15%
	100 pts. 100%

Academic Integrity: We encourage full group and class collaboration on all aspects of this course. However, individual assignments, especially posts and written material, are to be done individually, in the own words of the student (unless otherwise noted). Feel free to request clarification on this point at any time.

Non-original work will be disqualified. Late assignments will be deducted 5% for each day late.

Grades will be assigned according to the following formula:

95 – 100% A
90 – 94% A-
87 – 89% B+
84 – 86% B
80 – 83% B-
77 – 79% C+
74 – 76% C
70 – 73% C-
67 – 69% D+
64 – 66% D
60 – 63% D-
< 60% F

Books and Materials:

This course is designed to expose students to a wide selection of relevant articles, books and other media. Books can be purchased or checked out from your favorite library, electronic copies (usually pdf files) of set readings will be available via the class website.

Required:

Future Babble, Dan Gardner, 2010, Virgin, ISBN: 978-0-753-52236-3
Physics of the Future, Michio Kaku, 2011, Anchor Books, ISBN: 978-0-307-47333-2
Science Fiction Prototyping, Brian David Johnson, 2011, Morgan & Claypool, ISBN: 978-1608456550
Open Sources 2.0: The Continuing Evolution, Chris DiBona, Mark Stone, Danese Cooper, 2005. O'Reilly Media. ISBN-13: 978-0596008024

The following assignments require you to select and read ONE of the following titles from the TWO categories for in-depth discussion (no purchase is needed; use of a library copy is equally acceptable). Part of the assignment involves stating the reasons for your choice, so some research into each will be necessary even though reading the other four is not mandatory. (Please note that if you want to buy a book that is out of print, you could try a search using bookfinder.com, a free service which aggregates second-hand titles. But if you can't locate your first choice, get another book: the assignment deadline remains the same.)

"Foresight History" (pick one)
Envisioning the Next 50 Years, by Bruce Sterling, 2002. Random House, ISBN: 0-8129-6976-6
The Extreme Future, James Canton, 2006, Plume, ISBN: 978-0-452-28866-9
Futurecast, Robert J. Shapiro, 2008, St. Martins Press, ISBN: 0-312-35242-5
The Next 100 Years, George Friedman, 2009, Anchor Books, ISBN: 978-0-7679-2305-7

"Classic Foresight" (pick one)
The Art of Conjecture, Bertrand de Jouvenel, 1967, Basic Books, ISBN: 0-465-00429-6
The Foresight Principle, Richard A. Slaughter, 1995, Praeger, ISBN: 0-275-95293-2
The Art of the Long View, Peter Schwartz, 1991, Currency Doubleday, ISBN: 0-385-26732-0
Future Shock, Alvin Toffler, 1984 [1970], Bantam Books, ISBN: 0-553-27737-5

Schedule and Deliverables

In weeks where readings are set, all should be completed and a substantive post made to Moodle by the end of the week noted. In the interest of ongoing class conversation online, at least two other *substantive posts responding to others*' *thoughts* are expected between residencies.

Prior to Residency 1

Assignment: Bring your favorite example of foresight, science fiction or future thinking. Be prepared to talk a little bit about it in front of the group.

1/18/13 Residency 1: A Futurist who doesn't like foresight

In this residency, we will discuss the class syllabus and projects, course expectations, surfacing assumptions about the future, extended introductions. Each person will present favorite foresight, science fiction or future thinking example, explain what it is and why it's their favorite.

We will discuss the Foresight History and Classic Foresight teaching assignments and talk about book selection.

Other topics: Why foresight? Why now? What is and what is not futures studies and strategic foresight, understanding strategic conversations, accelerating change: continuities, cycles, and novelties, the need for holistic thinking and a systems view/

Prior to Residency 2

01/20-01/27 Beginning with the Contrary

Read: Start reading Dan Gardner's *Future Babble.*

Post: Responses to this set of readings by the end of the week. What is Gardner's take on strategic foresight?

Select and immediately buy or borrow your chosen "Foresight History and Classic Foresight" works.

01/27-02/3 Beginning with the Contrary

Read: Finish reading Dan Gardner's *Future Babble*

Post: Your final response to Future Babble. This may be written, or in another suitable form of your choosing (e.g., comic, mind-map, video presentation) so long as it is cleared with the instructor.

2/3- 2/10 Foresight History "How did they do?"

Read: Begin reading your Foresight History selection

Collaborate: With group members who have picked the same Foresight History Selection to discuss what you thought.

Post: Your initial response to the Foresight History Selection. How did the author do? What was right? What was wrong? Did it matter? What was helpful? Reflect the views and opinions of your collaborators. What did they think? How did that affect your thinking about the book?

2/10-2/15 Foresight History "How did they do?"

Read: Finish reading your Foresight History selection

Collaborate: With group members who have picked the same Foresight History Selection to discuss what you thought. Prepare to teach your selection.

Post: Your final response to Foresight History. This may be written, or in another suitable form of your choosing (e.g., comic, mind-map, video presentation) so long as it is cleared with the instructor.

2/15/13 Residency 2: Welcome to the World of Foresight

In this residency, we talk about where Foresight sits in the worlds of business, government, art and academia. We will discuss *Future Babble* as a popular view of foresight, exploring the works points.

Each Foresight History team will teach their selection to the rest of the group, followed by Q&A and discussion.

Prior to Residency 3

02/17-02/24 Classic Foresight

Read: Begin reading your Classic Foresight selection

Collaborate: With group members who have picked the same Classic Foresight Selection to discuss what you thought.

Post: Your initial response to the Foresight History Selection. How did the author do? What was right? What was wrong? Did it matter? What was helpful? Reflect the opinions of your collaborators. What did their perspectives teach you?

02/24-3/3 Classic Foresight

Read: Finish reading your Classic Foresight selection

Collaborate: With group members who have picked the same Classic Foresight Selection and prepare to teach your selection

Post: Your final response to Foresight History. What kind of discipline is futures studies? How does it differ (or not) from other fields, disciplines, sciences, and ways of thinking? This may be written, or in another suitable form of your choosing (e.g., comic, mind-map, video presentation) so long as it is cleared with the instructor.

3/3-3/10 Science Fiction Prototyping

Read: Begin reading *Science Fiction Prototyping*

Post: Initial response to *Science Fiction Prototyping.* How is it similar to the Classic and Historical Foresight works?

3/10-3/15 Science Fiction Prototyping

Read: Finish reading *Science Fiction Prototyping*

Post: Final response to *Science Fiction Prototyping*, exploring
Post: Your idea for a possible SF prototype to be developed in Residency 3

3/15/13 Residency 3: Foresight and Science Fiction

We will discuss in depth the different approaches used and explored in the Classic Foresight readings. Each Classic Foresight selection team will teach their book to the rest of the group.

Other topics: overview of the Futures Field (origins, history, influences), “Images of the future” (Polak) and “the basic paradigm” (Dator), Beyond Utopia and Dystopia; Cone of Possibility Space, “Possible, Probable and Preferable” as Scenarios & Foresight Modes, The role of creativity and imagination in foresight, Futures Wheel, Manoa/Dator alternatives – four archetypes, GBN Scenario planning – the 8-step “2x2 Matrix” approach.

We will break off into teams to develop Science Fiction Prototypes based upon your Foresight History and Classic Foresight collections. At the end of the session you will present out your prototypes to the group.

Discussion of Grand Challenges

Prior to Residency 4

03/17 – 03/24 Seeing the Future through the lens of Science and Technology

Read: Begin Reading *Physics of the Future*

Post: Responses to this set of readings. How does the author blend all of the previous approaches?

03/24-03/31 Seeing the Future through the lens of Science and Technology

Read: Finish Reading *Physics of the Future*

Post: Final response to *Physics of the Future*

03/31-04/7 What kind of Future do you want to be from?

Assignment: Read first half of *Open Sources 2.0: The Continuing Evolution*,

Post: Your thoughts about where your research is taking you

04/7-04/12 What kind of Future do you want to be from?

Assignment: Finish *Open Sources 2.0: The Continuing Evolution*,

Post: Your thoughts about where your research is taking you

04/12/13 Residency 4: What kind of Future do you want to be from?

We will discuss the work of Mikio Kaku and how he blends multiple foresight approaches.

Guest Professor: Jay Melican to discuss design and foresight in industry. Review Grand Challenges

You will present your final project outlines proposals and receive feedback from your instructor and peers. We will workshop each idea, collaborating and adding to each presentation.

Prior to Residency 5

04/14-04/21 Work on your Final Project

Post: Thoughts on progress of you final project

04/21-04/28 Work on your Final Project

Post: Thoughts on progress of you final project

Please communicate with me early and often if you have questions or concerns with your final project.

04/28-05/5 Work on your final projects

05/5-05/10 Prepare presentations for final residency 05/10

Rehearse your presentations and get feedback from your peers. Come well-prepared to deliver a great presentation.

05/10/13 Residency 5: Envisioning the Future

In this residency, you will present your final projects, and answer questions from a group of external reviewers.