**MKTG 511: Pioneering Innovation: Room SBA 140**

Dr. Charla Mathwick  
Office: Rm 260, School of Business  
Class Time: Tues., 5:40 – 9:20 p.m.  
Office Hours: Thursday 1-5 p.m. or by Appointment

Email: charlam@sba.pdx.edu

**Course Description:** This foundational MBA course provides students with an understanding of the innovation process and its relationship to creating and managing value. A market-driven disruptive approach to innovation is emphasized. This course will include methods for fostering the creative process and research tools designed to evaluate market reaction to product or service offerings. The course is case and project based. Concurrent enrollment in BA508 is required.

**Course Materials:**

1. **Harvard Business School Course PACK:** the required readings for this course are available to be purchased directly from Harvard Business Online through the following Course Link:

   [https://cb.hbsp.harvard.edu/cbmp/access/32201305](https://cb.hbsp.harvard.edu/cbmp/access/32201305)

   Materials available from Harvard directly are indicated in the **Course Outline below with an asterisk***. You should purchase the CASE PACKET before classes begin and read “Catching the Wave” to prepare for our first class discussion. We will discuss the additional readings during the first class.

2. The complete citations for the course readings not included in the Harvard Course Pak are contained in the attached syllabus. Readings include a combination of journal articles which are available through the PSU library as well as a number of book chapters which have been placed on e-reserve through the Library.

3. **IN ADDITION** to Readings, we also have one required and one optional text, available through Amazon or the PSU Bookstore:

   **REQUIRED TEXT:**
   

   **OPTIONAL TEXT:**
   
Course Structure:
This course is designed to provide you with a framework for identifying, analyzing and assessing market-driven needs that serve as the basis for product, service, and business model innovation. This course is an introduction to the market planning process and examines fundamental marketing concepts and decision tools currently in use. The course focuses on market need identification, product/service concept development, and business model generation. The course emphasizes analytical, inferential, and communications skills essential to creative problem solving in highly ambiguous innovation contexts.

Course Objectives:
- Introduce fundamental concepts related to opportunity identification and market-driven disruptive innovation.
- Gain exposure to qualitative and quantitative research techniques necessary to support a critical analysis of marketplace opportunities.
- Develop creative problem solving skills within highly ambiguous environments.
- Enhance ability to communicate concisely and coherently.

Outcome Assessment: At the end of the course, each student should be able to:
- Develop market assessment strategies relevant to various innovation contexts including:
  - Identify disruptive market conditions
  - Assess the potential impact of competitive and market forces
  - Product/service concept development given specific market needs
  - Identify relevant research approaches for various innovation contexts
  - Critically evaluate the planning process/assumptions

Course Requirements and Basis for Grade:

<table>
<thead>
<tr>
<th>Basis For Grade</th>
<th>Summary</th>
<th>Grade Weight</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Team Assignment #1-3</td>
<td>30 %</td>
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<tr>
<td>2.</td>
<td>Team: Final Written Plan &amp; Pitch</td>
<td>15 %</td>
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<td>3.</td>
<td>Peer Evaluation</td>
<td>5 %</td>
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<tr>
<td>4.</td>
<td>Individual Case Assignments/Homework</td>
<td>35 %</td>
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<td>5.</td>
<td>CASE EXAM: Individual Case Analysis</td>
<td>15 %</td>
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TEAM ASSIGNMENT:
Students will be asked to into teams and will be required to complete three assignments over the course of the term, designed to evaluate the feasibility of a product or service concept. This assignment wraps up during Finals Week with a written business plan and pitch based on the earlier team assignments. The concept, which will originate from the group, will be subject to a variety of assessments to refine and strengthen its market appeal. The weighting for the team assignments follows:
TEAM ASSIGNMENT #1(5%): Each team will be asked to identify an example of a market characterized by a compelling but frustrated need or a compelling opportunity -- the problem space you will be working in. Evidence of the significance of your problem must be provided to justify pursuing a commercial venture related to this topic.

TEAM ASSIGNMENT #2 (15%): Each team will be required to create a codebook to summarize a content analysis of online conversations, product reviews, customer interviews, or academic research related to the problem your group is investigating. This analysis is used to identify the primary themes associated with your identified problem, to record the verbatim comments of your target customer and to prioritize the relative importance of each major theme via a frequency analysis.

Building on this research, define the total available market (TAM) and various segments operating in this market. Provide evidence to support the selection of one market segment as your market entry point – the market segment with the most urgent need (i.e., ‘job-to-be-done’). You will be asked to size these markets, discuss market growth trends, and segment characteristics as relevant.

TEAM ASSIGNMENT #3: (10%) Develop an initial product/service concept that would satisfy the most urgent needs of the constrained market segment your team has identified. Identify technical risks and discuss the competitive positioning of your solution relative to existing options available to your market.

FINAL TEAM DELIVERABLE:
TEAM WRITTEN BUSINESS PLAN & PITCH (15%): Create a summary of your proposed business model. This portion of the assignment will be used to restate your team’s key assumptions regarding (1) your compelling market problem, (2) entry and overall markets served, (3) proposed concept, and (4) proposed business model including (5) reverse income statement. Following a summary of your analysis, make a recommendation regarding whether to Go/No GO/Recycle your proposed concept.

PITCH: The objective of this brief ten minute presentation is to provide an overview of your team’s analysis, explain the team’s findings, apply relevant course concepts, and recommend next steps.

TEAM MEMBER EVALUATION (5%): Team members receive the same grade on exercises and assignments unless the Team Member Evaluation forms indicate substantial differences in contribution. Evaluation forms should be structured around the team contracts developed during the first week of the quarter (Appendix A provides a sample evaluation form).
B. INDIVIDUAL CASE/ASSIGNMENTS (35%): Students will be asked to do a variety of individual assignments during the course of the term including reading and preparing Harvard Business Case Briefs** to support in-class discussion. Case Briefs provide a concise summary, analysis, and evaluation of the marketing situation to support recommendations for actions. Five individual cases are assigned for reading this term – each student will be required to complete THREE CASE BRIEFS for this portion of the grade. For those who do not complete the case brief for a particular week, you must still read the case and come to class prepared to discuss the details.

CASE BRIEF EVALUATION CRITERIA **
1. Begin with a one paragraph Executive Summary to introduce the objectives of the Case Brief and to summarize your conclusions.
2. I am primarily interested in demonstration of mastery of the concepts discussed in class. Therefore, apply concepts rather than simply define them.
3. Use details of the case for illustrative purposes only, rather than providing extensive details from the case as part of your response.
4. Make a recommendation if appropriate.

C. CLASS EXAM: INDIVIDUAL CASE ANALYSIS (15 %): An individual case analysis will serve as the final exam in this class, to allow each student to demonstrate individual mastery of the primary concepts covered in the course. Working independently, students will be required to write an assessment of this assigned case.

Course Procedures:
• Individual Assignments are due on the date specified by the professor.
• Late exercises are accepted with a 10% per day late penalty.
• Don’t hesitate to contact me in person, by telephone or via e-mail (charlam@sba.pdx.edu) if you have questions, need information, etc.

PLEASE DO NOT EMAIL ME THROUGH THE D2L SYSTEM

Course participants are expected to maintain high standards of academic honesty.
Academic honesty is a requirement for passing this course.
TENTATIVE COURSE OUTLINE

WEEK 1: Tues., Jan 6: Introduction to Pioneering Innovation: Provide an overview of topic and course direction and basic disruptive framework. Discuss what your final deliverable will entail.

TEXT READINGS:
- Christensen and Raynor (2003), Innovator’s Solution
  - CH 1: The Growth Imperative
  - CH 2: How to Beat Our Most Powerful Competitors?

HBS COURSE PACKET:

KEY TERMS:
- Disruptive Innovation Framework
- Creating Customer Value


TEXT READING:
- Christensen and Raynor (2003), Innovator’s Solution
  - CH 3: “What Products Will Customers Want to Buy?”
  - CH 4: “Who Are the Best Customers for Our Products?”

HBS COURSE PACKET:

KEY CONCEPTS:
- Market Segmentation
- Value-Based Market Positioning
- Jobs-to-be-Done: Identifying your Entry Segment

TEAM CONTRACT DUE
WEEK 3 – Tues, Jan 20  Qualitative Research Methods: Refine understanding of market needs through secondary library research and a structured analysis of consumer generated content found online in product reviews, & brand/tech/special interest forums.

HBS COURSE PACKET:

READING LIBRARY or e-RESERVE:

KEY CONCEPTS:
- Consumer Adoption Cycle
- Qualitative versus Quantitative Research
- Content Analysis – Customer Insight Research
- CodeBook Generation

TEAM ASSIGNMENT #1 DUE

WEEK 4—Tues. Jan 27 Market Adoption Behavior
This section introduces the technology adoption cycle as a market segmentation and business development framework. The impact of discontinuous versus continuous innovation on buyer behavior is discussed with an emphasis on buyer switching costs.

HBS COURSE PACKET:
- Mark, Ken (2010), FlyHT Crossing the Chasm, Ivy School of Business W12075. 9B12A022.***

READINGS LIBRARY or e-RESERVE:

KEY CONCEPTS:
- Buyer Decision Making Process
- Technology Adoption Cycle: Continuous vs Discontinuous Innovation
- Switching Costs
WEEK 5—Tues., Feb 3:  Lean Start-Up Development Process. Introduce the Lean-Start-up Approach. Discuss the ideation processes used to foster innovation.

READINGS:

KEY CONCEPTS
• Lean Start-up
• Job Mapping
• Ideation
• Minimum Viable Product

TEAM ASSIGNMENT #2: Code Book Analysis and Market Definition

WEEK 6—Tues., Feb 10: Business Model Innovation & Ecosystem Risks
Examine the benefits vs. risks of an internal versus modular business model

TEXT READING:
• Christensen and Raynor (2003), *Innovator’s Solution*
  o CH 5: “Getting the Scope of the Business Right”
  o CH 6: “How to Avoid Commoditization”
  o CH 7: Is Your Organization Capable of Disruptive Growth?
  o CH 8: Managing the Strategy Development Process

HBS COURSE PACKET:

READINGS LIBRARY or e-RESERVE:
*PDX e-reserve:  http://library.pdx.edu/index.php?st=3&it=1*
Search under instructor:  Mathwick               Password:  mathwick

OPTIONAL TEXT READING:

KEY CONCEPTS:
• Business Model Canvas
• Innovation Ecosystem – Business Model Partners
• Ecosystem Bottleneck
• RVP Analysis – Core Competency
WEEK 7, Tues., Feb 17: External Opportunities & Threats:
Environmental Scanning, Trend Analysis: Competitive Landscape and Business Positioning; Value Proposition Assessment

HARVARD BUSINESS ONLINE


KEY CONCEPTS:
• External Opportunity/Threat Analysis
• Competitive Positioning – Value Proposition
• Value Proposition

TEAM ASSIGNMENT #3 DUE: (Concept Description)

WEEK 8—Tues., Feb 24: CASE EXAM

CLASS EXAM:

WEEK 9: Tuesday, March 3 Business Model Innovation
Innovation in the design of your firm’s Business Model

HARVARD BUSINESS SCHOOL COURSE PACKET:
• Sahlman, William A. and Sara Greene Flaherty (2009); ZINK Imaging: Zero Ink; CASE #9-810-050,***


SUPPLEMENTAL TEXT READING:
• Osterwalder and Pigneur (2010), Business Model Generation,
  o “The Business Model Canvas,” p. 126-189
  o “The Business Model Design Process,” p. 244-259

KEY CONCEPTS:
• Business Model Innovation
WEEK 10—Tues., March 10 The Consequences of Innovation. Validating Business Assumptions and the unintended consumer, social, and competitive consequences of innovation will be discussed.

HARVARD BUSINESS SCHOOL CASE PACKET:
• Lawrence, Anne T. (2009), “Farming Pharmaceuticals: Ventria Bioscience and the Controversy Over Plant-Made Medicines,” IVEY Case #909M11.***

LIBRARY or e-RESERVE:
• PDX e-reserve: http://library.pdx.edu/index.php?st=3&it=1
  Search under instructor: Mathwick Password: mathwick

  FILE NAME: mathwick_rogers_diffusion

KEY CONCEPTS:
• Reverse Income Statements
• Planning Assumption Validation
• Stakeholder Management

WEEK 11, Tues., March 17 —
Final Team Written Business Plan & Pitch
## ASSIGNMENT MATRIX

<table>
<thead>
<tr>
<th>DATE</th>
<th>TEXT READINGS</th>
<th>READINGS</th>
<th>INDIVIDUAL CASE ASSIGNMENTS</th>
<th>TEAM ASSIGNMENTS</th>
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<tbody>
<tr>
<td><strong>WEEK 1: Intro to Innovation</strong></td>
<td>Innovator’s Solution (IS) CH 1 &amp; 2</td>
<td><em>Catching the Wave</em> (HBOL)</td>
<td>FORM TEAMS</td>
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<td>Jan 6, 2015</td>
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<td><strong>WEEK 2: Market Driven Innovation JTBD</strong></td>
<td>IS: CH 3-4</td>
<td><em>Innovation Guide Identifying JTBD</em> (HBOL)</td>
<td>CASE: QuickMedx (HBOL)</td>
<td>TEAM CONTRACT DUE</td>
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<td><strong>Week 3: Qualitative Research Methods</strong></td>
<td>Learn from Extreme Customers (HBOL)</td>
<td>Krippendorf p. 81-110 (e-reserve)</td>
<td>TEAM ASSIGN #1: Problem Statement</td>
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<tr>
<td>Jan 20, 2015</td>
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<td><strong>WEEK 4 Market Adoption Behavior</strong></td>
<td><em>High Tech Mktg Illusion</em> (e-reserve)</td>
<td>CASE: FlyHT: Crossing the Chasm (HBOL)</td>
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<td>Jan 27, 2015</td>
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<td><strong>WEEK 5: Lean Start-up</strong></td>
<td><em>Lean Start-up Changes Everything</em> (HBOL)</td>
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<td>TEAM ASSIGN #2: Market Definition and Codebook</td>
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<td>Feb 3, 2015</td>
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**NOTE:** HBR = Harvard Business Review; HBOL = Harvard Business Online [https://cb.hbsp.harvard.edu/cbmp/access/32201305](https://cb.hbsp.harvard.edu/cbmp/access/32201305)
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<td>WEEK 6</td>
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<tr>
<td>Feb 10, 2015</td>
<td>IS: CH 5-8, Bus Canvas (ph 1-55)</td>
<td>Innovation, Ecosystem (e-reserve)</td>
<td>CASE: Solar City (HBOL)</td>
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<td>WEEK 7: External Threats &amp; Opportunities</td>
<td>Core Competency, Transient Advantage (HBOL)</td>
<td>TEAM ASSIGNMENT #3 Initial Concept</td>
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<td>Feb 17, 2015</td>
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<td>WEEK 8: CASE EXAM</td>
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<td>CASE: Google Glass (HBOL)</td>
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<td>Feb 24, 2015</td>
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<tr>
<td>WEEK 9: Business Model Innovation</td>
<td>BusCanvas p. 56-79, 126-189, and p. 244-259</td>
<td>Discovery-Driven Innovation (HBOL)</td>
<td>CASE: ZINK (HBOL)</td>
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<td>Mar 3, 2015</td>
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<tr>
<td>WEEK 10: Consequence of Innovation</td>
<td>Consequence of Innovation (e-reserve)</td>
<td>CASE: Farming Pharmaceuticals (HBOL)</td>
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<td>Mar 10, 2015</td>
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<tr>
<td>WEEK 11: TEAM PRESENTATIONS</td>
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<td>FINAL TEAM PLAN &amp; PITCH</td>
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<td>Mar 17, 2015</td>
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SAMPLE TEAM CONTRACT
Define in writing, your expectations, in terms of group participation as well as grade. Be honest with each other to ensure you are aligned with a compatible group. The criteria for reviewing each other's performance must be clearly spelled out during the first week of class and handed in to me.

Please feel free to modify the Sample Performance Evaluation Form to fit the needs of your team and reflect your perspective on how to best provide feedback to each other regarding individual performance on teamwork. You can add or eliminate as many of these items as you feel necessary. I would like a signed copy of your team’s agreed-upon Performance Evaluation Form the second week of class this quarter. You will be asked to complete one evaluation form at the end of your team’s project. This information will serve as 5% of your final grade (i.e., Team Feedback Grade).

APPENDIX A
SAMPLE PERFORMANCE EVALUATION:
Team Name/Topic (s):________________________
Your Name _________________Member Being Evaluated ___________________
1. Quality of Contribution to Project

<table>
<thead>
<tr>
<th>Failure</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
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</table>

2. Quantity of Contribution to Project

<table>
<thead>
<tr>
<th>Failure</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
</tr>
</thead>
</table>

3. Dependability of Contribution to Project

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<thead>
<tr>
<th>Failure</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Excellent</th>
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