UNIVERSITY OF PENNSYLVANIA
THE WHARTON SCHOOL
Marketing 721
Analytic Methods for New Product Management
Fall 2016
COURSE SYLLABUS

Instructor: Robert Meyer   Office: 770 JMHH
                   Frederick H. Ecker/Metlife   email: meyerr@wharton.upenn.edu
                   Professor of Marketing   phone: (215) 898-1826

Course Description and Objectives:

Few activities undertaken by firms are more challenging than that of developing and launching new products and services. The activity is one that is fraught with risk; once a firm decides to embark upon a new-product venture, the outcome could just as easily prove to be the financial demise of the firm as its financial salvation. Yet, long-term viability is impossible without on-going commitment to active innovation. The purpose of this course is to provide an overview of the current state-of-the-art in tools for reducing risk in product-development strategies. Although the course will cover all phases of new-product development from idea generation and valuation to launch, an emphasis will be placed on analytic tools for lowering risk at the concept-development phase, before major capital investments in development are typically undertaken.

In this course you will be learning by doing. Early in the course each student, working in small groups, will be asked to develop a new-product concept (an original good or service) that would be seen as attractive by some target market. This concept will then serve as an individualized case study through the course, as you apply the various analytic tools to optimize the design and positioning of the concept, forecast future demand, and develop a communication and launch plan. The main deliverable will be new-product prospectus that details the nature of the product, its proposed target market, a proposed approach to commercialization and marketing, and a forecast of financial performance.

Course Readings and Materials

All course reading materials, class slides, and spreadsheets will be available either at the course's Canvas site,

https://wharton.instructure.com/login

Please bookmark and check frequently, as material may be updated.   Class lecture slides will be made available for download prior to each session.

Associated with each session will be a folder on Canvas of background readings that parallel the material that will covered in lecture.   While not required, you are strongly encouraged to

read these materials (wither before or after class) in order to gain a deeper exposure to class ideas.

Software

Because this a tools course, extensive use will be made of several software packages and applications. These are:

1. *JMP-12* (available to Wharton Students);
2. The natural-language processing package LIWC.   A 30-day license can be obtained for $9.95 at:

https://store5.esellerate.net/store/checkout/CustomLayout.aspx?s=STR6622550055&pc=&page=OnePageCatalog.htm

3. A new choice simulation builder termed ChoiceBuilder, for which accounts will be provided for each project team;

4. Qualtrics survey software.

Evaluation

Evaluations in the class will be based on the following scoring rule:

Group New Product Screening Exercise (DUE SEPT. 13):10%

Individual choice-based conjoint forecasting exercise (DUE SEPT. 27): 25%

NPD Prospectus (DUE OCT 20): 45%

Class participation: 20%

Note on class participation.   The class will be making extensive use of the "flipped classroom" model, where the first half of class will be lecture introducing you to the use of a tool, and the second half will be the application of the ideas in lecture to each team's project.   As such, attendance is essential, as most of the deliverables will be done IN CLASS.

New Product/Service Prospectus---final deliverable

The major deliverable for the course will be a prospectus for a new product or service.   The final report should be 15-20 pages long (including exhibits) and include address the "real, win, worth it" aspects of innovation. Specifically: the final report should include the following major elements:

1. A description of the new product opportunity, its likely target market, and market potential (i.e., is the opportunity real?)

2. A description of the exact design product design and price, and likely consumer reaction relative to competing offerings (i.e., can the opportunity win?);

3. A communication and distribution plan and budget; and

4. A five-year financial performance projection that considers a specified media, promotion, and distribution budget (i.e., is it worth it?).

Better projects will address these aspects using the analytic tools presented in class and utilized in exercises.

Contacting me

The best way to reach me is by email: meyerr@wharton.upenn.edu.
But if there is an emergency feel free to call me on my cell 610-453 8421 or office 215-898-1826

Course Schedule:

<u>Session</u>

1. August 30 **Tuesday**   **Introduction to the NPD processes,
Decision Traps**

       *Case: Royal Caribbean International 2016:
the on-board transportation problem*
Location: CANVAS
Canvas background readings: Staged-Gate
Processes
**Group Sign-up process on Canvas
(complete before Sept. 1 class)**

2. September 1st   **Thursday**   **Ideation Methods (Lecture and Activity)**

       Activity (groups): Ideation
Canvas background readings: Ideation

3. September 6th **Tuesday**   **Quantitative Concept Screening**

       Activity: (groups): Concept Screening
Canvas background readings: Diffusion Models

4. September 8th **Thursday**   **Qualitative Concept Screening and Sentiment
Analysis**

       Activity: (groups): Concept Screening
Canvas background readings: Sentiment
Analysis, Analytic Hierarchy Process

5. September 13th   **Tuesday**   **Stated Choice Methods 1: Design 1**

       Activity: (groups): Experimental Design
Canvas background readings: Stated Choice
Methods
Group New Product Screening Exercise due

6. September 15th   **Thursday**   **Stated Choice Methods 2: Design 2**

       Activity: (groups): Experimental Design
Canvas background readings: Stated Choice
Methods

7. September 20th   **Tuesday**   **Stated Choice Methods 3: Discrete Choice
                                                     Analysis**

Activity: (groups): Analysis
Canvas background readings: Stated Choice
Methods

8. September 22nd   **Tuesday**   **Stated Choice Methods 4: Simulations**

Activity: (groups): Simulation Design

9. September 27th   **Tuesday**   **Doing this in the Field: Qualtrics, Choice Flows**

Activity: (groups): Choice flow design

Individual CB Conjoint Exercise due

10. September 29^{th h}   **Thursday**   **Design Aesthetics and Messaging**

*Activity: (groups): Testing Messaging
Using Choiceflow software*

11. October 4th   **Tuesday**   **Preparing for Launch 1: Taditional Media
                                                     Budgeting**

Activity: (groups): Ad budgeting

12. October 6th   **Thursday**   **FALL BREAK NO CLASS**

13. October 11th   **Tuesday**   **Preparing for Launch 2: Social Media Planning,
                                                     Budgeting**

Activity: (groups): SM budgeting

14. October 13th   **Thursday**   **Emerging topics in New Product Analytics**

15. October 18th   **Tuesday**   **In-class Innovation Fair**

Activity: Group Presentations

16. October 20th   **Thursday**   **Prospectus Development (out of class)**

FINAL REPORTS DUE BY MIDNIGHT