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](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:

### Session

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 20\textsuperscript{th} Tuesday Stated Choice Methods 3: Discrete Choice Analysis
   
   Activity: (groups): Analysis
   Canvas background readings: Stated Choice Methods

8. September 22\textsuperscript{nd} Tuesday Stated Choice Methods 4: Simulations
   
   Activity: (groups): Simulation Design

9. September 27\textsuperscript{th} Tuesday Doing this in the Field: Qualtrics, Choice Flows
   
   Activity: (groups): Choice flow design
   
   Individual CB Conjoint Exercise due

10. September 29\textsuperscript{th} Thursday Design Aesthetics and Messaging
    
    Activity: (groups): Testing Messaging
    Using Choiceflow software

11. October 4\textsuperscript{th} Tuesday Preparing for Launch 1: Traditional Media Budgeting
    
    Activity: (groups): Ad budgeting

12. October 6\textsuperscript{th} Thursday FALL BREAK NO CLASS

13. October 11\textsuperscript{th} Tuesday Preparing for Launch 2: Social Media Planning, Budgeting
    
    Activity: (groups): SM budgeting

14. October 13\textsuperscript{th} Thursday Emerging topics in New Product Analytics

15. October 18\textsuperscript{th} Tuesday In-class Innovation Fair
    
    Activity: Group Presentations

16. October 20\textsuperscript{th} Thursday Prospectus Development (out of class)
    
    FINAL REPORTS DUE BY MIDNIGHT