### **Marketing Models I**

课程编号: 02814940授课对象: 研究生学 分: 2任课教师: 黄清漪课程性质: 方向必修开课学期: 2013 年秋

先修课程: 统计学, 计量经济学, 微观经济学的基础课程

# 任课教师联系方式:

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辅导、答疑时间: by appointment

一、项目培养目标

学习目标 1 系统掌握从事学术研究所需要的专业知识及理论。

具体目标 1、系统掌握本学科基础知识及基本理论

具体目标 2、掌握本学科前沿知识和理论、具有足够的相关领域的知识

具体目标 3、熟练掌握本学科的研究方法

学习目标 2 具有从事创新性研究的能力;能够撰写并发表高质量的毕业论文和学术论文 具体目标 1、撰写高质量的毕业论文和学术论文

具体目标 2、具有高水平的分析能力和批判思维能力,能够创造性地解决问题

学习目标 3 具有宽阔的国际视野, 能够与国际学者进行交流、合作的能力。

具体目标 1、具有优秀的口头交流和文字交流能力

具体目标 2、能够熟练地运用至少一门外语进行学术交流与沟通

学习目标 4 了解学术伦理, 具有强烈的社会责任感、关注社会问题

具体目标 1、了解社会责任感的重要性

具体目标 2、了解学术生涯中的学术道德问题

具体目标 3、关注现实社会问题

#### 二、课程概述

This course is about quantitative modeling in marketing research. Topics include: choice models, new product diffusion models, conjoint models, survival statistical analysis, mass customization models, product positioning models, customer lifetime value models, models of competition, marketing mix models, and other quantitative marketing models. The material will be primarily drawn from classical and recently published journal articles. Directions for future

research will be identified in the topics of marketing science covered in the course. The readings will be primarily drawn from such journals as *Marketing Science*, *Management Science*, the *Journal of Marketing Research*, and the *Journal of Marketing*.

三、课程目标(包括学生所提高的技能要求)

The objectives of this course are to introduce and discuss various quantitative/analytical models in marketing. First, this course provides the students necessary skills to build marketing models and tools to empirically analyze the data. Second, students are expected to be able to apply typical marketing models in analyzing and solving real world problems. Third, students should be able to competently review and criticize different streams of research and appraise its practical application in solving problems.

四、内容提要及学时分配

Week 1:

Topic: INTRODUCTION TO MARKETING MODELS

Lecture: Analytical models and empirical models

Reading:

Leeflang, P and D. Wittink (2000), "Building Models for Marketing Decisions: Past, Present, and Future," *International Journal of Research in Marketing*, **17** (2000), 105-126.

Moorthy, K. Sridhar. (1993), "Theoretical Modeling in Marketing", *Journal of Marketing*, **57** (April), 92-106.

Week 2:

Topic: CUSTOMER LIFETIME VALUE ANALYSIS

Reading:

Mulhern, Francis J. (1999), "Customer profitability analysis: measurement, concentration, and research directions." *Journal of Interactive Marketing*, **13** (1), 25-40.

Hogan, John E., Donald R. Lehmann, Maria Merino, Rajendra K. Srivastava, Jacquelyn S. Thomas, and Peter C. Verhoef. (2002), "Linking customer assets to financial performance." *Journal of Service Research*, **5** (1), 26-38.

Gupta, Sunil, Donald R. Lehmann, and Jennifer Ames Stuart. (2003), "Valuing Customers", *Journal of Marketing Research*, Vol. XLI (February), 7-18.

Week 3:

Topic: CONJOINT MODELS

Reading:

Elrod, Terry, Jordan J. Louviere, and Krishnakumar S. Davey. (1992). "An empirical comparison of ratings-based and choice-based conjoint models." *Journal of Marketing* 

Research. 29, 368-77.

Hauser, John R. and Vithala R. Rao. (2003). "Conjoint analysis, related modeling, and applications." In *Marketing Research and Modeling: progress and Prospects: A Tribute to Paul E. Green*, Eds. Yoram Wind, and Paul E. Green.

Park, Young-hoon, Min Ding, and Vithala R. Rao. (2008). "Eliciting Preference for Complex Products: A Web-Based Upgrading Method." *Journal of Marketing Research*. (October), 1-24.

Programming tutorial and practice: SAS

Kuhfeld, Warren F. (2005). "Marketing Research Methods in SAS." Working paper. TS-722.

#### Week 4:

Topic: PRICING MODELS AND BASKET ANALYSIS

Reading:

Ofir and Winer (2002) Pricing: Economic and Behavioral Models

Database Marketing (Chapter 13): Market Basket Analysis

#### Week 5:

Topic: SALES PROMOTION MODELS

Reading:

Neslin, S.A. (2002), "Sales Promotion", in *Handbook of Marketing*, Weitz, B. and Wensley, R., ed. London: Sage Publications, 310-338.

Ailawadi, K. L., B. A. Harlam, J. Cesar, and D. Trounce (2006), "Promotion profitability for a retailer: The role of promotion, brand, category, and store characteristics", *Journal of Marketing Research*, November, 518-535.

Anderson, Eric T. and Inseong Song (2004), "Coordinating Price Reductions and Coupon Events," *Journal of Marketing Research*, 41 (4), 411-422.

#### Week 6:

Topic: SEGMENTATION APPROACHES AND TERM PAPER PROPOSAL

Reading:

Kamakura, Wagner A. and Gary J. Russell. (1989). "A probabilistic choice model for market segmentation and elasticity structure." *Journal of Marketing Research.* **26** (4), 379-390.

# **Week 7:**

Topic: AGGREGATED DIFFUSION MODELS

Reading:

Bass, Frank. (1969). "A new product growth model for consumer durables." *Management Science* **15** (January): 215-227.

Srinivasan, V. and Charlotte H. Mason. (1986). "Nonlinear least squares estimation of new product diffusion models." *Marketing Science*, **5** (2), 169-178.

Golder, Peter N. and Gerard J. Tellis. (1997). "Will it ever fly? Modeling the takeoff of really new consumer durables." *Marketing Science*, **16** (3), 256-270.

## Supplements:

Mahajan, Vijay, Eitan Muller, and Frank Bass. (1993). New product diffusion models. *In Marketing: Handbooks of Operations Research and Management Science*. Eds. Jehoshua Eliashberg and Gary Lilien. Amsterdam: North Holland, 349-408.

#### Week 8:

Topic: INDIVIDUALIZATION AND RECOMMENDATION MODELS Reading:

Bodapati, Anand V. (2008). "Recommendation Systems with Purchase Data", *Journal of Marketing Research*, 45 (February), 77–93.

Arora, Neeraj. et al. (2008). "Putting One-to-One Marketing to Work: Personalization, Customization and Choice", *Marketing Letters*, 19, No. 3, 305-321.

Chung, Tuck Siong, Roland T. Rust, and Michel Wedel (2009), "My Mobile Music: An Adaptive Personalization System for Digital Audio Players", *Marketing Science*, 28 (1), 52-68.

### Supplements:

Choia, Sang Hyun, Sungmin Kang, and Young Jun Jeon. (2006). "Personalized recommendation system based on product specification values", *Expert Systems with Applications*, 31, 607–616.

#### Week 9:

Topic: CHOICE MODEL

Reading:

Ben-Akiva, Moshe and Steven R. Lerman (1985), Discrete Choice Analysis: Theory and Application to Travel Demand, MIT Press, Cambridge, MA.

Guadagni, Peter M., and John D. C. Little (1983), "A Logit Model of Brand Choice Calibrated on Scanner Data," *Marketing Science*, **2**(3), 203-38.

Chung, Jaihak and Vithala R. Rao. (2003). "A general choice model for bundles with multiple category products: application to market segmentation and pricing of bundles." *Journal of Marketing Research.* **40** (May), 115-130.

### **Week 10:**

# Topic: OVERVIEW/STUDENTS' PROPOSAL PRESENTATION

## 五、教学方式

In each session, the classes consist of instructor's lectures and student-led presentations and discussions. The discussion of each topic will be based on a few readings identified for the topic. In addition to covering an overview of a topic, productive directions of future research on the topic and some ways of conducting such future research will be indicated.

#### 六、教学过程中 IT 工具等技术手段的应用

Please review some aspects of statistical theory for reviewing such topics as maximum likelihood theory, hypothesis testing, model comparison, and Bayesian methods. It is possible that you have looked at these topics from earlier courses.

Also, please try to become familiar with one of the (standard) statistical software packages such as SAS and SPSS. It will be useful to you to skim through the respective manual.

Further, you may like to build some expertise in advanced computer languages such as MATLAB, AND R. Tutorial and brief review of coding skills on some advanced software will be given throughout the sessions depending on the progress.

### 七、教材

The papers for each topic and session will be used in stead of standard textbook.

#### 八、参考书目

- 1. Leeflang, Peter S.H., Dick R. Wittink, Michel Wedel, Philippe A. Naert. 2003. *Building Models for Marketing Decisions*, Kluwer Academic Publishers, 2003.
- 2. Ben-Akiva, Moshe and Steven R. Lerman. 1991. Discrete Choice Analysis, MIT Press.
- 3. Lilien, G. L., P. Kotler, and K. S. Moorthy. 1992. Marketing Models, Prentice Hall.
- 5. Greene, William. 2003. Econometric Analysis, Prentice-Hall, Fifth Edition.
- 6. Train, Kenneth E. 2003. Discrete Choice Methods with Simulation, Cambridge University Press.
- 7. Aaker, David A., V. Kumar, and George S. Day. 2003. Marketing Research. 8th edition. John Wiley & Sons, Inc.
- 8. Blattberg, Robert C., Byung-Do Kim, and Scott A. Neslin. 2008. *Database Marketing:*Analyzing and Managing Customers. Springer.

## 九、课程学习要求及课堂纪律规范

This course encourages active interaction and participation in class discussion. Students need to give sufficient excuse for their absence.

- 十、学生成绩评定办法(需详细说明评估学生学习效果的方法)
- ➤ Attendance and Participation (25%)
- ➤ Presentations (25%)
- > Term paper (50%)

Each student is required to write a paper which falls in the domain of quantitative marketing models. The idea in this paper must be original and have the potential to grow to a publishable paper.