

课程大纲 COURSE SYLLABUS

1.	课程代码/名称 Course Code/Title	数据驱动的营销科技 (Data-driven Marketing Analytics)
2.	课程性质 Compulsory/Elective	专业选修课 Major Elective Courses
3.	开课单位 Offering Dept.	信息系统与管理工程系
4.	课程学分/学时 Course Credit/Hours	3
5.	授课语言 Teaching Language	英文 English
6.	授课教师 Instructor(s)	郭悦 (信管系 guoy@sustech.edu.cn)
7.	开课学期 Semester	春 Spring
8.	是否面向本科生开放 Open to undergraduates or not	否
9.	先修要求 Pre-requisites	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) 无
10.	教学目标 Course Objectives	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) In this digital age, there is an unprecedented volume, velocity, and variety of marketing data available to firms. User characteristics and behaviors are tracked in detail for websites, social media pages, and ad campaigns, and information-rich user-generated content is contributed at breakneck speed throughout the web. The marketing world is a-buzz with excitement about using this “big data” to increase profits –yet, many marketers find real, measurable value-gain to be elusive. It is all too easy to suffer “analysis paralysis” in the face of a sea of metrics; to make misinformed recommendations based on flawed data or analytics; or to invest in an analytics tool that makes strong promises but doesn’t deliver actionable insights. At present, Internet marketing is in the ascendant, and many enterprises are accelerating into this emerging field. For network marketing, which indicators should we focus on? To what extent has it increased the marketing effect of the company? Through this lesson, students can clearly understand this knowledge.
11.	教学方法 Teaching Methods	(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.) The goal of this class is to prepare students to be effective marketing leaders in a landscape that involves digital initiatives and data. Students will learn to evaluate different analytics approaches and will gain hands-on practice gathering and analyzing large digital data sets containing both structured and unstructured data. Students will gain experience addressing questions such as: “What is the ROI of my social media initiative?”, “How should I target my paid ads?”, “What are users saying about my brand?”, and “Should I invest in this new analytics tool?” In the online marketing budget, nearly 50% is invested in search engine marketing. How much user attention did these marketing investments bring? To what extent has it increased the marketing effect of the company?
12.	教学内容 Course Contents	

(如面向本科生开放, 请注明区分内容。 If the course is open to undergraduates, please indicate the difference.)

Section 1	Introduction to the Digital Marketing Landscape
Section 2	Secondary Data
Section 3	Experimentation and A/B Testing
Section 4	Tools of Data Analysis
Section 5	Predictive Analytics and Machine Learning
Section 6	Recommendation system
Section 7	Social Media Marketing
Section 8	Mining User-Generated Text 1
Section 9	Mining User-Generated Text 2
Section 10	Data Cleaning
Section 11	Exploring Data; Frequencies; Descriptive Statistics
Section 12	Crosstabulations; Independent Samples t-Test; One-Way ANOVA
Section 13	Scatterplots & Correlation Analysis
Section 14	Linear Regression
Section 15	Causal Analysis
Section 16	Customer Lifetime Value (CLV)
Section 17	Loyalty marketing
Section 18	The power of the brand
Section 19	Precision marketing information push support
Section 20	Competitor monitoring and brand communicatio
Section 21	Market forecast and decision analysis support
Section 22	Brand crisis monitoring and management support
Section 23	Course wrap-up and review
Section 24	Group Presentation

13. 课程考核 Course Assessment

(① 考核形式 Form of examination; ②. 分数构成 grading policy; ③ 如面向本科生开放, 请注明区分内容。
If the course is open to undergraduates, please indicate the difference.)

考核形式 Form of examination	分数构成 Grading policy
出勤 Attendance	20%
课堂表现 Class Performance	20%
期末报告 Final Presentation	60%

14. 教材及其它参考资料 Textbook and Supplementary Readings

There is no required textbook. There are two optional textbooks:
Grigsby, M. (2022). Marketing analytics: A practical guide to improving consumer insights using data techniques. Kogan Page Publishers.
Kothari, P. (2015). Data analysis with STATA. Packt Publishing Ltd.