New media technology and analytics

Title of the course: New media technology and analytics

Analysis Instructor: Honglin DENG

Course code: xxxxxx

Teaching Language: English   **Targeted students:** Master

Contact Hours: 36   **Self-learning Hours:** 72

Prerequisites: Management information systems

Number of learners: Less than 62

Academic Year: Autumn   **Credits:** 3

Profile of Teaching Staff

Honglin DENG

Honglin DENG is an Associate Professor of Management Science and Engineering in the School of Economics and Management at Tongji University. He received his Ph.D. degree in Information Systems from the College of Business, City University of Hong Kong. Before joining Tongji University, he served as an assistant professor in Sun-Yat Sen University. Dr. Deng's research interests include e-commerce, social media, and e-healthcare. He applies multi-disciplinary research methods in his research.

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1. Course Description

This course explores the impact of new media technologies and analytics in the business, information systems, and marketing fields. Understanding how businesses leverage emerging media platforms and analytical tools is essential for effective decision-making and competitive advantage. We will delve into the fundamental theories and practical applications of new media technologies such as social media, livestreaming, virtual reality, and artificial intelligence. Students will learn how these information technologies influence users' and organizations' decision. Students will gain hands-on experience with analytical tools and methodologies used to interpret big data from various digital channels.

2. Course Objectives

➢ To introduce the fundamental theories and concepts of new media technologies

➢ To explore the strategic implications of new media on business practices, branding, and consumer engagement

➢ To develop practical skills in utilizing analytics tools to interpret and leverage digital data for decision-making

➢ To analyze ethical considerations and challenges associated with the use of new media technologies and analytics in business

3. Course Intended Learning Outcomes (ILO)

By the end of this course, students will be able to:

➢ ILO1. explain the impact of new media technologies on consumer behavior and business operations

➢ ILO2. apply theoretical frameworks to analyze and evaluate new media strategies

➢ ILO3. utilize analytics tools to interpret and derive insights from new media data

➢ ILO4. develop strategic recommendations for integrating new media technologies into business practices

4. Course Requirements and Assessment

Assessment	Ratio	Requirements
Final exam	30%	The final exam includes multiple choice, short-answer questions, and case analysis.
Group project	15%	One group project will be assigned and the students will have two-week preparation for presentation. Collaboration is key to learning and doing well on this project. Group members can evaluate each other's performance by providing comments on the peer evaluation form.
Assignments	30%	Three assignments and on individual case study will be assigned, and answers will be given after the due time. The assignments include case studies that reinforce the students' skills. We will discuss the cases in the next class after

		submitting the assignment. Each assignment and case accounts for 10%.
Class participation	25%	10%: attendance 10%: active participation 5%: in-class discussion performance

5. Course Arrangement

Course Name		New Media Technology and Analytics	Contact Hours	36
No.	**Teaching Unit**	**Content**	**Assignment/Case**	
1	Introduction	Overview of new media		
2	New Media Analysis Methods I	Basic methods I: (1) data and variables; (2) association rule	Assignment 1	
3	New Media Analysis Methods II	Basic methods II: clustering		
4	New Media Analysis Methods III	Basic methods III: classification		
5	New Media Analysis Methods VI	Basic methods VI: regression		
6	Social media analysis	Introduction of social media Social media analysis with cases	Assignment 1 submit (before class)	
7	Livestreaming analysis	Introduction of livestreaming commerce in China Livestreaming analysis with cases	Assignment 2 delivery	
8	XR analysis	Introduction of XR XR analysis with cases	Group project delivery	
9	Ethics in new media	Ethics and law topics in new media	Assignment 2 submit (before class)	
10	Assignment answers	Assignment 1 & 2 answers and analysis		
11	Group presentation	Group presentation	Group ppt submit	
12	Project analysis & summary	Group project review & summary of the course		

6. Textbook and References

Textbook:

- Kumar, Subodha, and Liangfei Qiu. *Social media analytics and practical applications: The change to the competition landscape*, (1st Edition, CRC Press, 2022)

Supplementary materials:

- Nelakurthi, Arun Reddy, and Jingrui He. *Social media analytics for user behavior modeling: A task heterogeneity perspective*. CRC Press, 2020.. (1st Edition, CRC Press, 2020)