

# Digital and Social Media Strategies

## COURSE SYLLABUS

Course name	Digital and Social Media Strategies
Course code	325222-B-6
Number of credits	6
Academic Year	2024 - 2025
Language of instruction	English



READ THIS MANUAL THOROUGHLY BEFORE THE START OF THE COURSE


Minor changes are possible; these will be communicated.

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## 1. Teaching staff

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	Role in course: Course coordinator & Lectures
	Profile: <a href="https://lachlandeer.github.io">lachlandeer.github.io</a>
	Office Hours: Wednesdays, 15:00 – 16:00
	Office Hour Format: Online or in K711, 15 mins slots
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	Name: Doga Bayraktar
	Contact: <a href="mailto:tisem.dsms@gmail.com">tisem.dsms@gmail.com</a>
	Role in course: Course Administration & Tutorials
	Profile: <a href="#">Doga Bayraktar   Tilburg University</a>
	Office Hours: Fridays, 10:00-11:00
	Office Hour Format: Online or in K715, 15 mins slots
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	Name: Roshini Sudhaharan
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	Role in course: Course Administration & Tutorials
	Profile: <a href="#">Roshini Sudhaharan   Tilburg University</a>
	Office Hours: Thursdays, 15:00-16:00
	Office Hour Format: Online or in K726
	Booking Link: <a href="#">here</a>

### 1.1 Instructor's Office Hours

We are here to help you through the course & want you to meet your expectations and personal learning goals. To that end, the instructors have scheduled consultation hours each week for you to meet us and discuss aspects of the lecture material, lab sessions and assignments that you are struggling with. Please make a booking using the links provided above.

Office Hours are subject to "fair and equitable use".

### Notes for scheduling with an instructor:

- ⊄ After you book a time slot, a calendar invite will be sent to your email. automatically. You **must** accept this invite to confirm a slot in his schedule.
- ⊄ Approx. 1 hour before our scheduled meeting a reminder with a Zoom link will be emailed to you.
- ⊄ If you plan to meet in person, you can ignore the Zoom link and head to his/her office. Please notify us if you intend to meet in person using the 'Additional Information' section of the Booking Tool.

We expect you to come to your schedule slot prepared and have clear questions in mind that you want to ask. If either of us feel you have come unprepared, we reserve the right to end the appointment and ask you to come back at a future time when you are more prepared.

### Additional Support

If you need support outside of this course, please refer to the following website:  
<https://www.tilburguniversity.edu/students/tutoring>

## 2. Course description

### 2.1 Position in program

Digital and Social Media Strategies is a class in the Marketing minor programs. As a result, this class is designed around learning and acquiring a toolkit, both at a conceptual level and through quantitative tools, that delivers solutions to marketing problems that inform marketing and managerial decision making. Students will use their existing marketing knowledge as a starting point for a deep dive into the world of digital markets where the traditional marketing approach needs refinement and extension to be relevant in the fast paced and ever-changing landscape that is online markets.

### 2.2 Position in the field

Digital and Social Media Strategies introduces students to the fundamentals of digital advertising and social media. Within each market we encounter, students will be introduced to the types of strategic questions marketers are working to answer and learn an analytics toolkit that they can employ to deliver the quantitative answers to inform strategic decision making.

The approach of decision driven analytics taught in this class puts students at the forefront of how leading scholars' and employers' approach digital marketing, with a toolkit that can be

utilized in future academic study, and when working in the private sector at firms of any size and scope.

## 2.3 Course description

This course familiarizes you with digital marketing and social media from the viewpoints of marketing analysts and marketing managers. The course content integrates marketing theory with (i) knowledge of the emerging and ever-changing digital marketing and social media landscape, and (ii) empirical evidence and data driven techniques that are fundamental in designing and improving digital and social marketing strategies.

## 2.4 Course learning goals

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

- Identify and explain relevant topics in digital marketing, such as marketing attribution models, search engine advertising, word of mouth and influencer marketing and online reputation.
- Explain, analyze, interpret and examine the challenges and opportunities of digital markets and social media.
- Analyze data from digital markets and social media using simple descriptive and causal statistics, and interpret the results to evaluate digital marketing strategies and suggest potential improvements.

## 2.5 Entry requirements

All students (i.e., students from Tilburg University and exchange students) are expected to possess adequate knowledge of marketing and statistics (i.e., including but not limited to regression analysis), data analytics skills (e.g., data handling, processing and cleaning), and basic knowledge of a statistical software package (examples: SPSS or R).

These skills are essential for a thorough understanding of the course, even though there are no binding prerequisites. It is strongly recommended that if you do not already have these skills, you take the initiative to acquire them before the start of the semester. Failing to do so may make it harder for you to follow course material in class and/or via self-study, making it more difficult for you to successfully complete the course.

## 2.6 Link with TEP

Digital and Social Media Strategies aims to train students to be digital marketing experts. As experts, they can make the necessary connections between marketing and other disciplines including economics, social science, and computer science. When doing so, students will deliver

the best answers to the problem at hand. We aim to develop students' intellectual independence and provide them with the critical mindset that is necessary to succeed in today's ever-changing marketing environment. Our approach also encourages scientific responsibility teaching students the appropriate application of scientific methods, importance of accurate reporting of results and encouraging open dissemination of findings.

### 3. Type of instruction

The course will involve in-person lectures, and tutorials (called Labs). We will strive to balance practical aspects of the material with a theoretical understanding of the concepts and frameworks involved.

Lectures introduce new material to build up one's understanding around each topic. Labs will feature instructional content designed to develop a quantitative toolkit. Students should use Labs to work in groups on formative assessment tasks with access to an instructor to ask clarifying questions. A final exam allows students to display their individual expertise acquired over the course.

#### 3.1 Lectures

Each week there will be a 90-minute lecture split into two 45-minute sessions. Lectures are designed to help walk you through the course readings - highlighting the key aspects, concepts, findings, and implications of the material. In addition to the scholarly insights, a key goal of the lectures is to identify implications for marketing practice. You are expected to have read assigned course material prior to coming to a lecture.

Parts of some lectures will be designed to be interactive, seeking input from student's perspectives. Come prepared to engage with the material!

The course schedule (below) provides a list of scheduled lecture topics.

#### 3.2 Computer Labs

Six (6) Computer Labs of 90 minutes are scheduled throughout the semester. Computer Labs begin in the second week (Calendar Week 36).

Students are expected to prepare answers to a formative Lab Assignment to discuss in class. The Lab Assignment will be a combination of short answer questions that revise the previous week's lecture content and a "hands on" component where students implement analysis methods discussed in class using a data set and small coding exercises implemented in the statistical software R.

Further information about the preparation for each Computer Lab will be provided in due course.

**Computer Lab Enrollment.** Students should enroll in one Lab Section. Enroll in the Lab Sections via Canvas only. Enrollment is done via a first come first served principle and enrollment will be finalized by the end of Calendar week 35. After that time, you cannot change Labs. By signing up for a Lab Section, you are enrolled in that day-time pair for all sections scheduled throughout the semester. Students who fail to self-enroll will be allocated to a Lab Section by the instructors.

### 3.3 Class Contribution

Students are expected to actively attend and participate in all scheduled sessions. Attendance alone does not constitute participation, and you are expected to engage with instructors and your peers in class.

### 3.4 Estimated Study Load

Planning your workload over the semester (even tentatively) can help to alleviate stress and pressure around deadlines and exams. The table below presents an estimated split of how your study time should be allocated in this class. We hope this helps you allocate time more efficiently within this class, and when juggling multiple classes.

Activity	No. of Sessions	Estimated Workload per session (hours)	Estimated Workload
<b>[A]: Graded Assessments</b>			
Final Exam Preparation	1	40	40
<b>[B]: Class Time</b>			
Lectures	8	2	16
Computer Labs	6	2	12
<b>[C]: Self Study</b>			
Lab Assignment Prep	6	6	36
Note taking	8	4	32
Reading	8	4	32
<b>Total [A] + [B] + [C]</b>			<b>168 hours</b>

## 4. Assessment

There is one (1) pieces of graded assessment throughout the course:

Graded Assessment	Weight (%)	Due Date	Minimum Passing Grade	Resit?	Compensation
Final Exam	100	TBA	5.5	Yes	No

**To pass Digital and Social Media Strategies you must obtain a final grade of greater than or equal to ( $\geq$ ) 5.5.**

**Remark:** TiSEM Exam regulations stipulate that that *if you take the resit exam, your most recent grade* is the grade you are awarded for the class, not the highest.

### 4.1 Assessment Types

#### **Final Exam:**

The final exam will be a closed book exam handwritten with pencil/pen and paper. It will be three (3) hours in duration. Questions in the exam will come from all aspects of the course material: lectures, computer labs, assignments and required readings.

The exam will be split into three components as follows:

- PART A: 15 Multiple Choice questions
- PART B: Short answer questions
  - ◊ 5 to 7 Short Answer questions. Each question may have multiple parts

More details on the exam will be provided in due course.

#### **Mock Exam:**

In Calendar Week 40 instructors will make a Mock exam available to students that provides examples of questions that could be assessed in the exam. Answers to the mock exam will be posted no earlier than 5 business days before the final exam is scheduled to take place.

The instructors urge students to take great care when revising and using mock exam solutions -- the final exam likely contains different questions to the mock exam, so "learning the answers" to these questions will not be sufficient for doing well in the final exam.



## 4.2 Grading

Exams will be graded through a mix of automated grading and by the instructors. Automated grading will be applied to questions that have a single correct answer that is chosen from a list of alternatives. Instructors will grade all questions that require explanation.

Students whose final exam grade is around the pass/fail boundary will be re-assessed by a second grader.

### **Dissemination of Grades:**

Within 15 working days after the assessment, grades will be published in the student administration.

### **Request for Regrading Final/Resit Exam:**

After exam grades are released, students can view their final exams under TiSEM staff supervision. If a student thinks there is an error in the grading, they should note the error and email the course email address within 48 hours of viewing the exam outlining what the errors are believed to be. **Instructors will then regrade the whole exam and you will be informed of any change to your grade.**

Your grade may increase or decrease depending on the outcome of the regrading procedure.

### **Exam Viewing:**

Sign-up forms will be made available by the instructors after the exams are graded and you will be notified by email. Deadlines for signing up will apply and may be short notice due to scheduling constraints by the TiSEM administration. No exceptions are made for students that miss the sign-up deadline for exam viewing.

## 4.3 Resit

There is the opportunity to resit the final exam once during the university's resit period. You must register for the resit the same way as for the final exam.

No other assessment pieces have the opportunity for a resit or resubmission.

## 4.4 Repeaters rule

### **Students who failed to complete before this Academic Year:**

Students who failed to complete the course before the start of the current academic year cannot roll grades over from previous attempts. This is due to a change in course material and assessment methods.

## 4.5 Working together

The instructors firmly believe in the merits of group work for enhancing learning and building a professional mindset. Students are encouraged to work in groups on the formative tasks that comprise the instructional material for Labs. Group work involves explaining and re-explaining concepts among team members, which is a good learning strategy to re-enforce one's own understanding of a concept.

## 5. Code of Conduct

### 5.1 Code of Conduct

Tilburg University has a [Code of Conduct](#) that all employees and students at Tilburg University are expected to follow. Please read this Code of Conduct.

In addition, Digital and Social Media Strategies has its own Code of Conduct and Social Rules that students and instructors are expected to follow. These are available on Canvas. Please read these before the course begins.

If the Codes of Conduct are incongruent in a particular scenario, Tilburg University's Code of Conduct will be applied.

### 5.2 Academic Integrity

Cheating, plagiarism, and/or doing work for another person who will receive academic credit are all impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help for an assignment or the presentation of unacknowledged material as if it were the student's own work. Having unauthorized notes at your exam, cribbing from a fellow student, manipulating results, and copying text from others without references are examples of fraud. Once fraud is suspected, the Examination Board will be informed accordingly. Please refer to the [website](#) for more information.

### 5.3 "Be"-ing a good classmate / student in this course

We have clear expectations of how we should all interact in class and in meetings. They are summarized by the "8 Be's" below:

### **Be Active**

Learning via passive listening is an ineffective learning technique. Come to discussion classes prepared to ask questions and answer questions posed by instructors and others in class. This will lead to a much more enjoyable learning experience for us all. We would much rather have an engaging discussion on topics where we share mutual interest and cover less material than lectures being a monologue.

### **Be "Hands-on"**

The class is designed to be 'hands-on' in the sense that you will be expected to complete a substantial number of exercises in formative assessment tasks for the Labs. We strongly believe the only way to learn to be a good marketer is to actively engage with the material.

### **Be Prepared**

We expect you to dedicate an average of 12 hours per week of study time to this course.

Use this time to look over required readings, re-examine course notes and work on your assignments. Looking over required readings means that our discussions will have more substance, and (ideally) be more insightful.

Quick tip: If you find yourself not understanding part of the course content, take a break and come back to it in an hour or so. Come talk to the instructors during office hours, computer labs or via the course email address if it remains unclear.

### **Be Professional**

We expect you to treat instructors and your class members collegially. In addition, we have a set of Social Rules and a Code of Conduct that provides further details of acceptable and unacceptable behavior.

When writing an email, being professional also means using a meaningful subject line, identifying yourself (i.e., Regards, Lachlan at the end of the email), and keeping the message focused. We aim to reply to emails within 72 hours (approx. 3 days) Monday - Friday, but there might be a slight delay if you write to us late Friday evening.

We strongly encourage you to provide feedback about both format and content during the course. We will provide survey links to collect this feedback at regular intervals. Be professional when filling these out.

### **Be Informal (but not too informal!)**

Do not address us with "Mr.", "Dr.", or "Prof.". Please use our first names (i.e., Lachlan, Doga and Roshini). More formality than that makes us feel uncomfortable. You can add us on LinkedIn or Twitter - where we maintain professional accounts, but not other social media accounts.

### **Be International**

This course is taught in English. You are obliged to speak English whenever there are international students present and all messages on Discussion Boards must be in English. *If in doubt, communicate in English.*

Tip from Lachlan: As someone who has studied at universities where I do not speak the native language - be assured it is *very much appreciated* by the non-Dutch speaking students.

### **Be Healthy (Physically & Mentally)**

Physical and Mental health are important, and we would argue they are more important than your coursework. If you miss one or two classes, course material is posted online, and working through that, completing the readings and talking with your classmates about what you missed is more than enough to catch up. We do not provide lecture recordings for missed classes.

On the mental health side, the instructors are aware how challenging study can be, especially when paired with one's 'non-study life.' *We strongly encourage you to prioritize mental health over **everything** else.* Lachlan is happy to talk with you informally to share some common experiences and strategies, but he is not a professional. If you feel like you need to talk to someone, a good starting point might be [Tilburg's Education Coordinators](#) or the [student psychologists](#) at the University.

### **Be Fair & Honorable**

In group assignments we expect all group members to contribute actively and evenly. If you are struggling with parts of a group assignment you are working on, talk to your group members and to the instructors rather than withdrawing from conversations with your colleagues. Being fair & honorable also means that you should not plagiarize others' work. We stick closely with the TiSEM's Fraud and plagiarism policies which are outlined [here](#).

## 6. Course structure

The following is a preliminary course schedule. Any changes will be communicated via Canvas as the course progresses.

Week	Day of Week	Class	Topic
1	Wed	Lecture	Course Introduction
			<b>Unit 1: Digital Advertising</b>
	Fri	Lecture	Advertising Attribution
2	Mon	TA	Review Questions & Hands On: Intro R / Attribution Models
	Fri	Lecture	Marketing Mix Modelling
3	Mon	TA	Review Questions & Hands on: Media Mix Modelling
	Fri	Lecture	An Introduction to Field Experiments
4	Mon	TA	Review Questions & Analyzing data from Field Experiments
	Wed	Lecture	Incrementality and Experimentation in Digital Ad Markets
5	Mon	TA	Review Questions & Hands On: Analyzing Ad Experiments
			<b>Unit 2: Social Media</b>
	Wed	Lecture	Word of Mouth and Influencers
6	Mon	TA	Review Questions & Hands On: Does Twitter Impact the Movies?
	Wed	Lecture	Online Reputation
7	Mon	TA	Review Questions & Hands On: Managerial Responses and Online Reviews
	Wed	Lecture	Firm Activities on Social Media & Virality

## 7. List of materials

There are no assigned textbooks for this class.

Readings will take the form of academic and professional articles, book chapters and blog posts. You can access these readings via Canvas. If you print the literature, please do so with the environment in mind and print double-sided, in low resolution and/or with several pages per page.

The list below should be considered preliminary and subject to change. Readings will be posted on Canvas one week prior to a lecture taking place.

### Reading Materials

#### Lecture 1: Course Introduction

Required reading:

- ✧ B. de Langhe and S. Puntoni, Leading With Decision-Driven Data Analytics, MIT Sloan Management Review, Dec. 7, 2020.
- ✧ Sahni, N. S., Wheeler, S. C., & Chintagunta, P. (2018). Personalization in email marketing: The role of noninformative advertising content. *Marketing Science*, 37(2), 236-258.
- ✧ Defau, Laurens, and Alexander Zauner. "Personalized subject lines in email marketing." *Marketing Letters* 34.4 (2023): 727-733.

Recommended readings:

- Deighton, J. A., Mela, C. F., & Moorman, C. (2021). Marketing Thinking and Doing. *Journal of Marketing*, 85(1), 1–6.
- Kannan, P. K., Li, H. (2017). Digital marketing: A framework, review and research agenda. *International journal of research in marketing*, 34(1), 22-45.
- Lamberton, C., & Stephen, A. T. (2016). A Thematic Exploration of Digital, Social Media, and Mobile Marketing: Research Evolution from 2000 to 2015 and an Agenda for Future Inquiry. *Journal of Marketing*, 80(6), 146–172

#### Lecture 2: Advertising Attribution

Required readings:

- Think with Google (2024). "Modern Measurement Playbook", Pages 5 to 9
- Amazon (2021a). What is marketing attribution? A beginner's guide
- Kinley, J. (2020). Marketing Attribution with Markov: How Cloudera uses Markov models to solve the multi-channel attribution problem"
- Kinley, J. (2019). Data-Driven Marketing Attribution Custom Attribution with Cooperative Game Theory.

Preparation for computer labs:

- Introduction to R
- R Guide for NSC Statistics
- R for Marketing Students

### Lecture 3: Media Mix Modelling

Required readings:

- Accenture (2018). Exploring Granular Data in MMM: Updated Models, Better Insights.
- Amazon (2021b). What is a media mix and why is it important?
- Chan & Perry (2017). Challenges And Opportunities In Media Mix Modeling, Working Paper

### Lecture 4: Field Experiments

Required Readings:

- FieldExperiments.pdf
- fieldex\_analysis.pdf

Recommended Readings:

- Experiments.pdf
- ANOVA.pdf

### Lecture 5: Incrementality Experiments in Advertising

Required Readings:

- Blake, T., Nosko, C., & Tadelis, S. (2015). Consumer heterogeneity and paid search effectiveness: A large-scale field experiment. *Econometrica*, 83(1), 155-174.
- Johnson, G. A., Lewis, R. A., & Nubbemeyer, E. I. (2017). Ghost Ads: Improving the Economics of Measuring Online Ad Effectiveness. *Journal of Marketing Research*, 54(6), 867–884

Recommended readings:

- Google Case Study (2014). DefShop's experiment proves that the Google Display Network drives sales and brand awareness.
- Think with Google (2015). A Revolution in Measuring Ad Effectiveness: Knowing Who Would Have Been Exposed.
- Coviello, L., Gneezy, U., & Goette, L. (2017). A large-scale field experiment to evaluate the effectiveness of paid search advertising. Working Paper

## Lecture 6: Word of Mouth and Influencers

### Required Readings:

- Huang & Mozorov. (2023). Video advertising by Twitch Influencers. Working Paper
- Tian, Z., Dew, R., Iyengar, R., (2023). Mega or Micro? Influencer Selection Using Follower Elasticity. Journal of Marketing Research
- Ershov & Mitchell (2024). "The Effects of Advertising Disclosure Regulations on Social Media: Evidence From Instagram." RAND Journal of Economics
- Seiler, Yao & Wang (2018). Does Online Word-of-Mouth Increase Demand? (and How?) Evidence from a Natural Experiment? Marketing Science

### Recommended Readings:

- Ershov, He & Seiler (2024). How Much Influencer Marketing is Undisclosed? Evidence from Twitter. Working Paper
- Chintagunta, P. K., Gopinath, S., & Venkataraman, S. (2010). The effects of online user reviews on movie box office performance: Accounting for sequential rollout and aggregation across local markets. Marketing science, 29(5), 944-957.
- Li, Haviv and Lovett. (2024) Opposing Influences of YouTube Influencers: Purchase and Usage Effects in the Video Game Industry

## Lecture 7: Online Reputation

### Required Readings

- Luca, M. (2016). Reviews, reputation, and revenue: The case of Yelp. com. Com (March 15, 2016). Harvard Business School NOM Unit Working Paper, (12-016).
- Proserpio, D., & Zervas, G. (2017). Online reputation management: Estimating the impact of management responses on consumer reviews. Marketing Science, 36(5), 645-665.
- Fradkin, A., & Holtz, D. (2023). Do incentives to review help the market? Evidence from a field experiment on Airbnb. Marketing Science, 42(5), 853-865.
- Mayzlin, D., Dover, Y., & Chevalier, J. (2014). Promotional reviews: An empirical investigation of online review manipulation. American Economic Review, 104(8), 2421-2455.

### Recommended Reading:

- He, S., Hollenbeck, B., & Proserpio, D. (2022). The market for fake reviews. Marketing Science, 41(5), 896-921.

### Extra Reading on Methodologies:

- Huntington-Klein, N. (2022). Regression Discontinuity in *The Effect: An Introduction to Research Design and Causality*.



## Lecture 8: Firm Activity on Social Media

### Required Readings:

- Gong, S., Zhang, J., Zhao, P., & Jiang, X. (2017). Tweeting as a marketing tool: A field experiment in the TV industry. *Journal of Marketing Research*, 54(6), 833-850.
- Borah, A., Banerjee, S., Lin, Y. T., Jain, A., & Eisingerich, A. B. (2020). Improvised marketing interventions in social media. *Journal of Marketing*, 84(2), 69-91.
- Tellis, G. J., MacInnis, D. J., Tirunillai, S., & Zhang, Y. (2019). What drives virality (sharing) of online digital content? The critical role of information, emotion, and brand prominence. *Journal of marketing*, 83(4), 1-20.
- Akpınar, E., & Berger, J. (2017). Valuable virality. *Journal of Marketing Research*, 54(2), 318-330.

### Recommended Readings:

- Moldovan, S., Steinhart, Y., & Lehmann, D. R. (2019). Propagators, creativity, and informativeness: What helps ads go viral. *Journal of Interactive Marketing*, 47(1), 102-114.