

**MKT-556: INTERNET MARKETING**

**Spring 2023**

**3.0 units. T/Th 2-3:20pm and T 6:30-9:30pm**

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| **Instructor:** | *Nikhil Malik* |
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| **Office Hours:** | *4-5 pm Tuesday or by appointment.* |
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| **COURSE DESCRIPTION** |

Internet facilitates search, communication, ads, and sales powered by Web pages, Search Engines and Ad Tech. We will also study how marketers can optimize web pages and ad spend to maximize customer volume and sales. To optimize from Marketer’s point of view, we will understand in detail intermediary platforms. Google’s organic search, sponsored search rankings, Ad platforms and numerous other Ad Tech platforms that connect marketers to customers. We will also discuss how to track customer touchpoints, deploy targeted marketing, offer personalized choices, and innovate new products using fine grained customer feedback.

The massive activity on the internet generates large amounts of customer data. In this course, we will understand how to optimize search engines and Ad targeting using Big-Data and AI Algorithms. In particular, we will develop algorithms for personalization and targeting. We will examine concerns of privacy and massive centralization of data with a handful of platforms. We will discuss decentralized Ad Tech using Web 3.0 technologies. This application will dis-intermediate the market entirely. In understanding web 3.0, we will get an overview of Blockchains, cryptocurrencies, security and how to mine customer data on the public Blockchain. A key component of this course is to scrutinize implications of internet market technologies. Do customers correctly interpret and trust these tools? Is the adoption equitable and if not does it have the potential of exacerbating current inequalities or creating new ones? What are the consequences of Amazon and Google giving their customers access to powerful digital tools?

The AI Algorithm and Web 3.0 tools will be introduced in the class assuming that students have no prior familiarity. While a few lectures will delve into hands on usage of these tools, this will not directly be part of any assignments, quizzes, or projects. The goal is not train students on becoming data scientists or software developers. Instead, the goal is to demystify the technologies so that students are able to develop internet marketing strategy that fully utilizes cutting edge technology.

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| **COURSE OBJECTIVES** |

By the end of the course, participants will be able to:

1. Calculate and optimize search engine marketing performance metrics.
2. Develop campaign and publisher strategy for organic search, sponsored search and Ad spend.
3. Make data driven recommendations on deploying digital marketing tools like Search Engine optimization, Ad targeting and Blockchains.
4. Quantify gains for firms by driving adoption of Machine Learning and Blockchain based tools among their customers.
5. Devise strategy for customer adoption of cutting-edge digital marketing tools.
6. Manage risks from lack of interpretability, bias and bubbles from adoption of digital technologies.
7. Demystify internet market technologies – Google’s Page Ranking, Ad Rank, Cookies, Targeting, Machine Learning and AI algorithms, Big Data, Blockchains, NFTs and Metaverse.

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| **COURSE MATERIALS** |

Numerous online articles on upcoming technology disruptions, software setup instructions and other content relevant to completing class projects will be shared during the class.

Cases and Articles

1. Jeffery, Mark, et al. "Air France internet marketing: optimizing Google, Yahoo!, MSN, and Kayak sponsored search." Kellogg School of Management Cases (2017).
2. Edelman, Benjamin, and Scott Duke Kominers. "Online Marketing at Big Skinny." Case Study (2011).
3. Jill Avery, Ayelet Israeli, Emma von Maur. " [THE YES: Reimagining the Future of E-Commerce with Artificial Intelligence (AI)](https://hbsp.harvard.edu/product/521070-PDF-ENG?itemFindingMethod=My%20Collections)" Case Study (2018).
   * Ayelet Israeli, Eva Ascarza. “[Algorithmic Bias in Marketing](https://hbsp.harvard.edu/product/521020-PDF-ENG?itemFindingMethod=My%20Collections)”. Industry and Background Note (2020).
4. Jeffrey J. Bussgang, Edward B. Berk, Nathaniel Schwalb. "[AirFox (A): Embracing the Blockchain and an ICO](https://hbsp.harvard.edu/product/818097-PDF-ENG?itemFindingMethod=My%20Collections)." Case Study (2018).

There is no assigned textbook for this class. Following suggestions can be used by students go beyond the course syllabus based on their interests. Any concepts in these books pertinent to course syllabus will be fully described in course material itself.

* Hoseph F Hair Jr, Dana E Harrison, Haya Ajjan. Essentials of Marketing Analytics. O'Reilly Media, Inc., 2021.
* Radziwill, Nicole. "Blockchain revolution: How the technology behind Bitcoin is changing money, business, and the world." The Quality Management Journal 25.1 (2018): 64-65.
* Mougayar, William. The business blockchain: promise, practice, and application of the next Internet technology. John Wiley & Sons, 2016.

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| **GRADING** |

Overall grade distribution in the class will follow school guidelines and policy on a class average of 3.5. Each student’s overall course grade will be based on a group work (40%) and individual performance (60%). The breakdown is as follows:

**Class Participation** 15%

**Group Work (Assignments + Projects)** 45%

**Quizzes/Exams** 40%

Please note that *no late assignments will be accepted*. All written work is due at the beginning of class on the due date.

Calculations of your final score will be based on a weighted average of the normalized score for each of the three components of the class. The final scores will then be sorted, and natural breakoff points will determine the final course grade for each student.

CLASS PARTICIPATION

The main way you will learn during the weekly classes is to participate. In addition, your ability to perform well on in-class exercises and quizzes is highly dependent on your active participation in class. Note, if you come to class every time, and do not actively engage in class discussions, your participation will be zero. If you do not come to class, this will count against your overall participation score. Finally, coming to office hours, emailing the professor, etc., is not participation. Participation is what happens in class.

GROUP WORK

Students will form groups of 3 in the first two weeks of class. These groups will remain unchanged for the entire semester. These groups will work together on class project, in class exercises and assignment submissions. It will reflect poorly if a group has two or fewer members present during class. All group members are not guaranteed exactly equal points on group projects and assignments.

Group project will make up 15-20% of the grade. The final submission of the group project will be due at the end of semester. However, in-class presentation of proposed project will be scheduled during the semester. The project will consist of two main components. The first component will be an in-depth examination of a selected topic (e.g., Instagram influencers, third party cookies, E-mail marketing, campaign attribution, TikTok, viral marketing, mobile marketing). The second component will be a proposal of how AI Algorithms or Web 3.0 technologies can assist or disrupt these ecosystems.

Group assignments will make up 25% of the grade. Each group will first work on the assignment in class and make a preliminary submission at the end of the class. The purpose of this submission is to ensure students are utilizing their time in class. Subsequently, each group will make a final submission on the due date (typically the week after). This final submission will be more refined and presentable. The group assignments, including the in class work, do not require preparation for a topic before class.

QUIZZES/EXAM

Three Quizzes will be given in this class. These will use a short answer format or short case study comprised of anywhere from 12-20 questions. Students who do well on these quizzes pay attention in class, read the assigned materials, and think about the concepts presented during the course. If you tend to miss class, you will likely do poorly on the quizzes. The quizzes are open book. The date of quizzes will be known well in advance.

THE IMPORTANCE OF COURSE EVALUATIONS

The student course evaluations are valuable. This course is continuously improved, based on feedback from students and instructor observations.

EMERGENCY PREPAREDNESS

In case of a declared emergency if travel to campus is not feasible, the USC Emergency Information web site (<https://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of USC’s Blackboard learning management system (blackboard.usc.edu), teleconferencing, and other technologies.

USE OF RECORDINGS

Pursuant to the USC Student Handbook ([www.usc.edu/scampus](http://www.usc.edu/scampus), Part B, 11.12), students may not record a university class without the express permission of the instructor and announcement to the class. In addition, students may not distribute or use notes or recordings based on University classes or lectures without the express permission of the instructor for purposes other than personal or class-related group study by students registered for the class. This restriction on unauthorized use applies to all information that is distributed or displayed for use in relationship to the class.

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| **COURSE OUTLINE AND ASSIGNMENTS** |

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|  | **Topics/**  **Daily Activities** | **Reading** | **Deliverables**  **(Quiz and Assignments)** |
| Week 1 1/10 | Introduction  SEM, Ad Tech, AI Algorithms and Web 3.0  Course structure, case studies, quizzes, and class project  Ungraded In-class exercises |  |  |
| Week 2 1/17 | SEM / Ad Tech  Case Study: AirFrance  Content: SEM, SEO, Sponsored Search. | Case Study 1: AirFrance |  |
| Week 3 1/24 | SEM / Ad Tech  In-Class Exercise on Case Study: AirFrance  Content: SEM Performance Metrics, Keywords, Campaign and Publisher Strategy |  | Case Study 1 Assignment  Submission |
| Week 4 1/31 | SEM / Ad Tech  Case Study: BigSkinny  Content: Google Ad Auction, Google Ad Rank, Ad bidding |  |  |
| Week 5 2/7 | SEM / Ad Tech  In-Class Exercise on Case Study: BigSkinny  Content: Search Engines, Google Page Ranking, SEO | Case Study 2: BigSkinny |  |
| Week 6 2/14 | SEM / Ad Tech  Content: Ad networks, Ad servers, Ad blocking, Ad Targeting, Ad exchanges, Native ad, Dynamic Ads.  Quiz 1 Prep |  | Case Study 2 Assignment  Submission |
| Week 7 2/21 | SEM / Ad Tech  Content: Ad cookies, privacy, re-targeting, blocking and Personalization. |  | **Quiz 1.** |
| Week 8 2/28 | SEM / Ad Tech  Review of Quiz 1  5 minute 1-slide Class Project Proposal Presentations  Content: How can Big Data and AI Algorithms assist in SEM, Ads and e-commerce |  |  |
| Week 9 3/7 | Algorithms  Case Study: E-commerce with AI.  Content: Basics of Machine Learning and AI Algorithms | Case Study 3: E-commerce with AI | **1-slide Class Project Proposal** |
| *Spring Break* | | | |
| Week 10 3/21 | Algorithms  In-Class Exercise on Case Study: E-commerce with AI  Content: Applications of Algorithms in Marketing  Hands on Re-targeting Algorithm Development (Excel or Python) |  | Case Study 3 Assignment  Submission |
| Week 11 3/28 | Algorithms  Articles: Algorithmic Bias.  Hands on Re-targeting Algorithm Development (Excel or Python) | Article: Algorithmic Bias in Marketing | **Quiz 2** |
| Week 12 4/4 | Web 3.0  Case Study 3: AirFox ICO  Content: Blockchain, Bitcoin, Cryptocurrency and ICO | Case Study 4: AirFox ICO |  |
| Week 13 4/11 | Web 3.0  In-Class Exercise on Case Study 3: AirFox ICO  Content: Decentralizing search and Ads on Blockchains, NFTs in Marketing |  | Case Study 4 Assignment  Submission |
| Week 14 4/18 | Web 3.0  Content: AR/VR, Metaverse in Marketing  **Class project final presentations.** |  |  |
| Week 15 4/25 | **Class project final presentations.**  In class Quiz. |  | **Quiz 3** |
| Week 16 5/2 | Buffer for **Class project final presentations.** |  | Final Class project submission |

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| **OPEN EXPRESSION AND RESPECT FOR ALL** |

An important goal of the educational experience at USC Marshall is to be exposed to and discuss diverse, thought-provoking, and sometimes controversial ideas that challenge one’s beliefs. In this course we will support the values articulated in the USC Marshall “[Open Expression Statement](https://www.marshall.usc.edu/about/open-expression-statement)” (https://www.marshall.usc.edu/about/open-expression-statement).

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| **STATEMENT ON ACADEMIC CONDUCT AND SUPPORT SYSTEMS** |

**Academic Integrity:**

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, comprises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university’s mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or “recycle” work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](https://policy.usc.edu/studenthandbook/) or the [Office of Academic Integrity’s website](http://academicintegrity.usc.edu/), and university policies on [Research and Scholarship Misconduct](https://policy.usc.edu/research-and-scholarship-misconduct/).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

**Students and Disability Accommodations:**

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [osas.usc.edu](http://osas.usc.edu/). You may contact OSAS at (213) 740-0776 or via email at [osasfrontdesk@usc.edu](mailto:osasfrontdesk@usc.edu).

**Support Systems:**

[*Counseling and Mental Health*](http://sites.google.com/usc.edu/counseling-mental-health) *- (213) 740-9355 – 24/7 on call*

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[*988 Suicide and Crisis Lifeline*](http://988lifeline.org/) *- 988 for both calls and text messages – 24/7 on call*

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[*Relationship and Sexual Violence Prevention Services (RSVP)*](http://sites.google.com/usc.edu/rsvpclientservices/home) *- (213) 740-9355(WELL) – 24/7 on call*

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[*Office for Equity, Equal Opportunity, and Title IX (EEO-TIX)*](http://eeotix.usc.edu/) *- (213) 740-5086*

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[*Reporting Incidents of Bias or Harassment*](http://usc-advocate.symplicity.com/care_report) *- (213) 740-5086 or (213) 821-8298*

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[*The Office of Student Accessibility Services (OSAS)*](http://osas.usc.edu/) *- (213) 740-0776*

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[*USC Campus Support and Intervention*](http://campussupport.usc.edu/) *- (213) 740-0411*

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[*Diversity, Equity and Inclusion*](http://diversity.usc.edu/) *- (213) 740-2101*

Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[*USC Emergency*](https://emergency.usc.edu/) *- UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[*USC Department of Public Safety*](https://dps.usc.edu/) *- UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call*

Non-emergency assistance or information.

[*Office of the Ombuds*](http://ombuds.usc.edu/) *- (213) 821-9556 (UPC) / (323-442-0382 (HSC)*

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[*Occupational Therapy Faculty Practice*](http://chan.usc.edu/patient-care/faculty-practice) *- (323) 442-2850 or* [otfp@med.usc.edu](mailto:otfp@med.usc.edu)

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

**Appendix I. MARSHALL GRADUATE PROGRAMS LEARNING GOALS**

**How MKT 556 Contributes to Marshall Graduate Program Learning Goals**

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| **Marshall Graduate Program Learning Goals** | **MKT 556 Objectives that support this goal** | **Assessment Method** |
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| ***Learning Goal #1: Develop Personal Strengths.***  **Our graduates will develop a global and entrepreneurial mindset, lead with integrity, purpose and ethical perspective, and draw value from diversity and inclusion.** | | |
| 1.1 Possess personal integrity and a commitment to an organization’s purpose and core values. | 6 | Team Project |
| 1.2 Expand awareness with a global and entrepreneurial mindset, drawing value from diversity and inclusion. | 3,4,5,6 | Quizzes & Team Project |
| 1.3 Exhibit awareness of ethical dimensions and professional standards in decision making. | 6 | Team Project |
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| ***Learning Goal #2: Gain Knowledge and Skills.***  **Our graduates will develop a deep understanding of the key functions of business enterprises and will be able to identify and take advantage of opportunities in a complex, uncertain and dynamic business environment using critical and analytical thinking skills.** | | |
| 2.1 Gain knowledge of the key functions of business enterprises. | 1,2 | Quizzes |
| 2.2 Acquire advanced skills to understand and analyze significant business opportunities, which can be complex, uncertain and dynamic. | 2,3,4 | Quizzes & Team Project |
| 2.3 Use critical and analytical thinking to identify viable options that can create short-term and long-term value for organizations and their stakeholders. | 1,2,5 | Quizzes |
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| ***Learning Goal #3: Motivate and Build High Performing Teams.***  **Our graduates will achieve results by fostering collaboration, communication and adaptability on individual, team, and organization levels.** | | |
| 3.1 Motivate and work with colleagues, partners, and other stakeholders to achieve organizational purposes. | 3,4,5 | Team Project |
| 3.2 Help build and sustain high-performing teams by infusing teams with a variety of perspectives, talents, and skills and aligning individual success with team success and with overall organizational success. | 3,4,5 | Team Project |
| 3.3 Foster collaboration, communication and adaptability in helping organizations excel in a changing business landscape. | 3,4,5 | Team Project |