MEM 490-0-20
Special Topics in Engineering Management
Digital Marketing for Engineers and Entrepreneurs

Instructor:

Randy Hlavac
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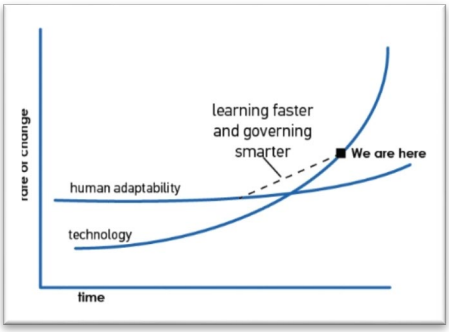
Meetings: By Appointment

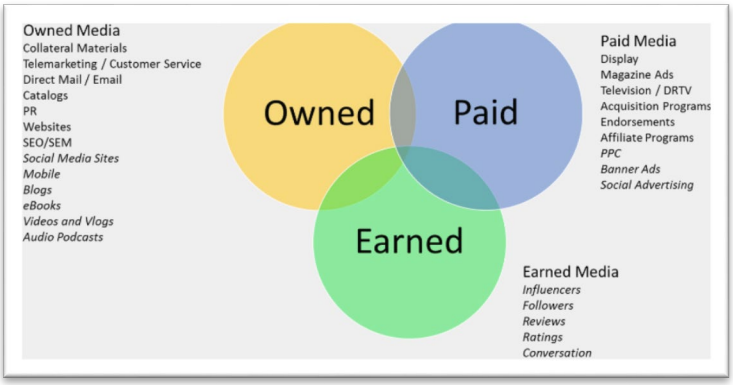
Location and Time:

Tuesdays 6:30 PM - 9:30 PM
North Garage Padula Room 1430

Overview:



Since 2007, new technologies have radically changed the ways consumers engage with businesses. In that year, the introduction of the iPhone and Android phones along with high speed, wireless communications technologies allowed consumers worldwide to engage with companies – and each other – online. ***Communication*** became fast, ubiquitous and global. Also starting in 2007, cloud computing, big data systems, AI and real-time data capture technologies transformed ***capacity*** and allowed for real-time social networking systems, genetic algorithms, and high speed access to information warehouses. Finally, 2007 saw the creation of new social networking technologies like Twitter, Facebook and online collaboration systems. The new ***capabilities*** fostered the development of online and virtual communities and let consumers begin talking with each other – in real time – about their needs and passions. Companies were no longer the primary sources of information to let consumers make their business and personal decisions.



The challenge is these technology-based accelerations are still moving forward. Moore's Law is still in effect and it is impacting business as well as engineering. Today, who you know and who you are linked up with is as important as what you know. For businesses, they need to know how to use technologies to

engage with consumers in real-time and to monitor social conversations to learn consumer needs and respond to them. As we will explore in the course, the traditional marketing drivers of paid and owned media has now been supplanted by earned media – followers, user recommendations and reviews, influencers, and online engagement. The result is the creation of new digital marketing strategies and tactics designed to engage and build consumer-centric relationships with a company's customers and prospects.

Digital Marketing for Engineers and Entrepreneurs is designed to give you an in-depth, hands-on learning experiences designed to grow your professional persona, connect with thought leaders in engineering and business technologies, and learn how businesses design, develop, justify and deploy high impact digital marketing strategies. In the course, you will learn from top marketing and technology leaders and learn using the newest digital and marketing books and eBooks. This course will show you how to use the technical accelerations to position yourself to grow a business' market share and how to design and manage digital marketing programs anywhere in the world.

Course Objectives:

By the end of the course, you will be able to achieve the following objectives:

- **Network Forward** – Today, engineering professionals and entrepreneurs need to be able to identify and engage with technology and business thought leaders and leaders in industries where you want to be employed after graduation. Throughout the course, you will use social analytics tools and proven engagement techniques to identify, connect with, and engage key individuals and professional communities you will need to build your career after graduation.
- **Becoming an Industry Influencer** – You will learn who the influencers are in your professional community and will use techniques designed to engage them. During the course, you will learn how to use retweets, hashtags, and keywords to amplify influencer content and develop your own content to become recognized in your engineering community or a community you want to develop as an entrepreneur.
- **Using Cloud-based Big Data Marketing Systems** – In the course, you will use cloud-based big data systems to define, profile and quantify any business or consumer market – anywhere in the world. You will also see how big data is used to cluster markets to create deep, highly actionable market segments you can use to build marketing programs.
- **Using Social Analytics Systems** – You will be trained to use social analytics systems designed to identify communities, influencers, hashtags, keywords, and all types of media used by your professional markets. We will also use these tools to build a marketing plan for a client.
- **Multimedia Experiences** – By the end of the course, you will learn how to create engaging content designed to impact your professional market. You will learn how to develop, deploy and market a filter & focus blog, a vlog [video log], and a podcast.
- **Digital Marketing Development** – In the course, you will develop a holistic digital marketing plan for a client. Your team will learn a 7-step process designed by Google and YouTube to gather insights into a high value market and transform them into a 52-week

marketing program. You will then take the program, establish a budget, create performance funnels, establish KPIs [Key Performance Indicators], perform scenario testing and justify the marketing program. The final will be a team presentation of your plan to the client.

- **Surveys and Conjoint Analyses** – To learn about your high value markets, you will build surveys, conjoint analyses and perform A/B split tests designed to best understand your high value markets.

The course uses a combination of lecturers; live and virtual presentations from social, digital, and mobile marketing experts and practitioners; cutting-edge reading materials; and class and individual assignments to learn key concepts and skills. This course takes a very hands-on approach with final case projects with real firms; use of state-of-the-art social monitoring, networking, and analytical tools; and networking with experts on social and mobile marketing. This hands-on approach equips students with the tools, networks, and skills they can immediately use in their careers

Academic Integrity

Any violation of the Academic Integrity Policy will be reported immediately

Contacting the Instructor:

The instructor is available for an in-person meeting, Skype call, or Blue Jeans discussion throughout the quarter. Please contact him through this Canvas site, by calling 630.328.9550, or by sending him an email at r-hlavac@northwestern.edu.

The instructor will respond to you within 24 hours to set up a meeting with you or your team. If you do not have a response, please email him at r-hlavac@northwestern.edu. While the instructor strives to be responsive, if you contact him on a weekend, he may not respond until the following Monday. However, he does monitor email and Canvas requests on weekends...as a general rule.

Reading Materials:

The course has 3 text books you need to purchase from Amazon. All 3 are recent books designed to provide you with important insights and skills related to Digital Marketing. There are also several eBooks we will provide for free within the course.

The required text books are:

Known: The handbook for building and unleashing your personal brand in the digital age
Mark Schaefer
2017 Mark Schaefer Solutions
Amazon Link to Purchase

Content Chemistry - 5th Edition
2016 Andy Crestodina and Orbit Media

Amazon Link to Purchase

Vlog Like a Boss: How to Kill It Online with Video Blogging
Amy Schmittauer
2017 Vlog Boss Studios LLC
Amazon Line to Purchase

Technical Skills

In the course, you will be using a wide range of social media and blogging systems. However, we will train you on all of the skills required to successfully use them and, if you don't feel comfortable with any system, don't hesitate to contact the instructor at r-hlavac@northwestern.edu. The only skill you need is the ability to use a browser to enter in the names of the software systems and then register for them by answering questions on the site.

Accessible NU:

Any student requesting accommodations related to a disability or other condition is required to register with AccessibleNU (accessiblenu@northwestern.edu; 847-467-5530) and provide professors with an accommodation notification from AccessibleNU, preferably within the first two weeks of class. All information will remain confidential.