University of Montana

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BMKT 460.01: Marketing of High-Technology Products and Innovations

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MKTG 460
Marketing of High-Technology Products and Innovations

Professor Mohr   **Classroom:** GBB 122
Phone: 243-2920   **Time:**   2:10-3:30
Office: Room 306   Tues./Thurs.
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Office Hours: Monday/Wednesday, 1:30-3:30, or by appointment

Prerequisite for this course: Principles of Marketing or equivalent. Because we will be discussing how basic marketing concepts and practices are adapted for and used in a high-tech environment, basic knowledge of these marketing concepts is required. Please see me if you would like to borrow a basic book to review basic concepts.

Required Textbook: Mohr, Jakki, Sanjit Sengupta, Stanley Slater (2010), *Marketing High-Technology Products and Innovations*, 3rd Edition, Upper Saddle River, NJ: Prentice-Hall. Accompanying Web site: www.markethightech.net

Required Powerpoint Notes: On Dropbox!
Required Readings: On Dropbox!
Required Podcasts: On YouTube!

Course Objectives: This class will explore concepts and practices related to marketing of technology-driven products & innovations. The unique, fast-paced environment of high-tech means that standard marketing strategies must be modified. Specific topics include:

- the defining characteristics of high-technology industries
- different types and patterns of innovation, and their marketing implications
- technology transfer and spin-outs
- the need for (and difficulties in) adopting a customer-orientation in technology businesses
- tools used to gather marketing research/intelligence in technology-driven industries
- use of strategic alliances and partnerships in marketing technology
- how to 'cross the chasm' between early adopters and mainstream customers
- adaptations to the marketing mix (the "4 P's") required in a high-tech environment
- use of online marketing and social media marketing to complement traditional advertising
- branding strategies used by technology companies, including ingredient branding
- regulatory and ethical considerations in technological arenas.

The class will explore a range and diversity of industries and contexts. Focus will be placed on business-to-business high-tech contexts. Issues for both small and big business will be addressed. The course will provide a balance between conceptual discussions and applied/hands-on analysis. The domain will include both technological (R&D intensive) innovations (roughly 1/3 of class focus), digital business models (1/3), and the use of technology for marketing purposes including online and social media marketing, mobile marketing, etc. (1/3%). Clearly, these domains are inter-related!

Learning Outcomes: After taking this course you will be able to:
1. Analyze and dissect dynamics of high-technology industries to articulate critical success factors
2. Develop and evaluate marketing strategies for high-technology companies
3. Identify and gather the necessary information to develop solid marketing strategies for technology companies

4. Leverage Web 1.0, Web 2.0, and Web 3.0 for marketing purposes
5. Convey an understanding of critical emerging technologies.

Educational Philosophy: A classroom environment that stimulates active learning will enhance understanding, retention, and future utilization of the material. So, this course utilizes discussions, presentations, and reports, designed to facilitate the "doing" component of learning. I see my role as the facilitator of student learning. It is the student's job to come to class prepared to learn, to actively participate, to be involved, to be intellectually curious, to act with integrity and reliability, and to work collaboratively with their classmates.

Email -- According to University policy, faculty may communicate with students regarding academic issues only via official UM email accounts. Accordingly, students must use their UM accounts. Email from non-UM accounts will likely be flagged as spam and deleted without further response. To avoid violating the Family Educational Rights and Privacy Act, I cannot discuss confidential information (including grades and course performance) via phone or email.

Handling e-mail communication: Feedback from recruiters and others (including an article in the *Wall Street Journal*) indicates that students need more practice in writing professional e-mail messages. As a result, I expect all of your email correspondence with me to be professionally appropriate including a proper salutation, grammar, spelling, punctuation, capitalization, and signature with professional tone and content.

I respond to all email messages I receive *during the work week*. If you need a response to an issue faster than I can get to it on email, please feel free to reach me at my office: 243-2920 or stop by.

Academic Misconduct -- Integrity and honesty are basic expectations for behavior. It is your duty to act honestly and ethically in your coursework, and it is my duty to ensure a fair classroom environment for all students. *Cheating of any sort will not be tolerated.* Cheating, failure to follow instructions, and/or failure to follow course policies may result in a reduced grade or a failing grade.

The following message about academic integrity comes from the Provost's office: *"All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.* It is the student's responsibility to be familiar the Student Conduct Code (found online at http://www.umt.edu/vpsa/policies/student_conduct.php).

Students are expected to:
- Be knowledgeable of activities that are considered academic misconduct, as defined in the UM Student Conduct Code,
- Practice academic honesty on all exams, quizzes, homework, in-class assignments, and all other activities that are part of the academic component of a course,
- Encourage other students to do the same.

If you are unsure if a behavior will be viewed as academic misconduct, please ask. *A good rule of thumb is that any credit-earning activity in a course should represent the true skills and ability of the individual person receiving the credit*. A partial list of situations that are considered academic misconduct is in the SoBA Professional Code of Conduct (found online at

). If at any point a student is unsure if working with another student is permissible, that student should contact the instructor before doing so.

Please note that it is a form of academic misconduct to submit work that was previously used in another course. I also have a history of treating any plagiarism (from the Internet or any other source) quite severely. Always cite your sources appropriately. It actually makes your work more credible.

Disability Services for Students -- Students with disabilities will receive reasonable modifications in this course. The student's responsibilities are to request the modification from me with sufficient advance notice and to be prepared to provide official verification of disability and its impact from Disability Services for Students. To respect your privacy, please speak with me during my office hours about your needs.

Course Requirements: (Each is explained below in detail)

3 Exams	60%
Class Contribution/ Participation	15%
Out of class assignments, including	10%
networking and professional development	
Project work	15%

Total: 100%

Exams: The exams will include a mix of multiple-choice, short-answer, and problem-solving questions, testing factual knowledge about the readings and material covered during the semester. Additionally, some questions require integration, synthesis, and critical interpretation.
     * * No late exams or make-ups will be given. * *

Class Contribution: In order to stimulate active learning, class contribution will be graded.
Obviously, class quality is a function of the quality of each student's preparation.
Please note: You are not ready to participate if you are not PREPARED on a daily basis. The general rule of thumb for an upper division elective is 3 hours outside of class per hour inside of class. Please come to class conscientiously prepared (by doing the assigned readings carefully and thoughtfully)

My evaluation stresses the thoughtful, meaningful contributions to class discussions and not the quantity of participation per se. Quality participation is based on demonstration of learning/knowledge of class concepts and readings (through description, applications, examples, questions) and critical assessment of those concepts. Finally, your contribution to the spirit of the class (contributes to a positive learning environment) is also important.

Please ask me for feedback concerning your participation at any point during the semester. You will turn in a self-evaluation (see form in syllabus) on **Oct. 9**.

Out-of-Class Assignments: On occasion, I may ask you to do other work (prepare for class debates, apply the concepts we are learning to actual company situations, etc.) in order to ensure you are learning the material. I may also ask you to present examples to your classmates. Be ready to think extemporaneously, and please, always be prepared.
          Networking: Students will be expected to participate in two outside networking events this semester. Details will be given in class.

Project: Details coming during 2^(nd) week of class.

School of Business Administration Mission Statement and Assurance of Learning

The University of Montana's School of Business Administration enhances lives and benefits society by providing a world-class business education in a supportive, collegial environment. We accomplish this mission by acting on our shared core values of creating significant experiences, building relationships, teaching and researching relevant topics, behaving ethically, and inspiring individuals to thrive.

As part of our assessment process, the School of Business Administration has adopted the following learning goals and objectives for our undergraduate students:
Learning Goal 1: SoBA graduates will possess fundamental business knowledge.
Learning Goal 2: SoBA graduates will be able to integrate business knowledge.
Learning Goal 3: SoBA graduates will be effective communicators.
Learning Goal 4: SoBA graduates will possess problem solving skills.
Learning Goal 5: SoBA graduates will have an ethical awareness.
Learning Goal 6: SoBA graduates will be proficient users of technology.
Learning Goal 7: SoBA graduates will understand the global business environment in which they operate.

Semester Grading: Your final letter grade in the class is based upon the distribution of total points at the end of the semester. Plus/Minus grading will be used for final grades on the following scale.

93 - 100% A / 90 - 92% A-
   A = Demonstrates thorough, sophisticated understanding of the subject, displays mastery of high-tech marketing strategies; answers supported with compelling logic, critical insights, and careful attention to detail; communicated with professional/excellent oral and written communication skills.

87 - 89%   B+ / 83 - 86% B/ 80-82%   B-
   B = Good understanding of the material (possible occasional oversight of key facts/ issues) and/or minor issues with clear/concise written/ oral communication; lacks supporting detail/sophisticated insights.

77-79%   C+ / 73-76% C/   70-72% C-
      C = Basic/rudimentary comprehension of terms (possibly some inaccuracies); unclear communication skills that need significant attention/improvement.

67-69%   D+/ 63-66%   D/ 60-62%   D-
      D = Lack of knowledge/proficiency with class concepts and/or inability to communicate your degree of learning about class material.

Below 60% F = Dereliction of class responsibilities.

Extra Credit: Students may submit by 3:30 in the afternoon one week prior to each exam up to three **multiple-choice questions** that I will consider using on the exam. Any material is fair game: textbook, speakers, articles, films, class discussion. If I use your question(s), you will receive extra credit in the amount equal to the multiple-choice value of those points on the exam. An added bonus:

You'll likely get that exam question correct. If I use only a portion of your question, you will receive partial points. No late questions accepted. Don't put yourself in an awkward position by even asking—it is not fair to me or your peers.

Date	Topic/Article	Chapter
Tue 9.1	Introduction: Why "High-Tech Marketing?" What is "high-tech?" On Youtube Ch. 1a: Review of marketing; common characteristics of high-tech environments Ch. 1b: Unit one effects, etc.; network effects and standards; types of innovations (incremental/breakthrough), and contingency theory of high-tech marketing	1
Thurs 9.3	Innovation Ecosystems: Who is the customer?	1
Tue 9.8	Core Competencies; Strategy in High-Tech Firms	2
Thur 9.10	Sweet Spot; Value propositions	2
Tue 9.15	Culture of Innovativeness in High-Tech Firms Disruption; Creative destruction; skunkworks; "lean start-up/expeditionary" bi-focal vision; champions; etc.	3
Thur 9.17	Speaker #1: Mary Olson, Client Executive for Cloud and Managed Services Providers, IBM BlueMix 4:30-6:30 Hellgate Venture Network	
Friday 9.18	QuestMT!	
Tue 9.22	Reading #1 for ½ of class; Tech Transfer, incubators, and entrepreneurial ecosystems for ½.	
Wed. 9.23	Launch of "Pursue your Passions" / Women in Entrepreneurship	
Thur 9.24	Review for exam	
Friday 9.25	M&M/BAC Board meetings	
Tue 9.29	**Exam 1**	
Wedn. 9.30	6:00 p.m. Women of the Web: The Loft of Missoula	
Thur 10.1	Understanding high-tech customers: crossing the chasm	7
Tue 10/6	Speaker #2: John Chandler, "Big Data and Marketing Analytics"	
Thur 10.8	Crossing the chasm (cont.)	7
Tue 10.13	Product Development and Management in High-Tech Firms	8
Thur 10.15	(Continued) Self-Evaluation of Participation due 4:30-6:30 Hellgate Venture Network	
Tue 10.20	Digital Week Online and Social Media Marketing Kevin Keller here (and Wednesday)	
Thur 10.22	Mobile Marketing / Location Marketing	

Tue 10.27	Reading #2	
Thur 10.29	Review for Ex. 2	
Tue 11.3	**Exam 2**	
Thur 11.5	Pricing and online business models	10
Tue 11.10	Speaker #3: Dawn McGee: Financing and Valuation of high-tech start-ups	
Thur 11.12	Speaker #4: Nicole Hagerman Miller: Biomimicry 4:30-6:30 Hellgate Venture Network	
Tue 11.17	Speaker #5: Michael Fitzgerald, CEO/Founder of Submittable "The things I wish I would have known before starting my high-tech start-up…AND the things I'm glad I didn't know before starting my high-tech start-up."	
Thur 11.19	Project day	
Tue 11.24	Business Model Canvas, Lean Start-up	
Thur 11.26	**Happy Thanksgiving**	
Tue 12.1	Advertising	11
Thur 12.3	Branding	12
Tue 12.8	Ingredient branding	12
Thur 12.10	Course Wrap-up	
Thur 12.17	Finals week: **Exam #3** : 3:20-5:20 p.m. !	

On your own:

Market Orientation and Marketing/R&D Interaction	4
Partnerships and Alliances in High-Tech Markets	5
High-Tech Research Tools	6
Distribution Channels in High-Tech Markets	9
Digital Divide, Environmental Strategies, BOP	13

Self-Evaluation of Class Participation   **Name:**
(Due Thursday, October 15)

Class Participation is a function of:
- Voicing your ideas: do you attempt to *articulate your ideas* about the assigned reading and class concepts (description of class concepts; elaboration on assigned readings)?
- Sharing examples: do you bring up *current technology events* in the news, and/or *relevant examples* that are related to class tied to class concepts?
- Asking questions: Do you offer personal insights that build on relevant concepts?
- For "active" students: Do you give your classmates a chance to talk? Do you prioritize your contributions? How?
- For "quiet/shy" types: Are the contributions you would like to make written down in advance of class? (Examples, questions, most interesting..., etc.)

Please assign yourself a participation grade (0-100%)

My Score: _____

What are you doing that you think is very good with respect to your participation record?

What are you doing that you think is not as good as you wish it were with respect to your participation record? What steps will you take to improve it?

PS I will include in my evaluation of your participation *class respect*: do you respect the class environment (supportive of others' comments, respectful when they are talking; respectful of need to share "air time," maintain continuity of discussion, not buried in your laptop, etc.)?

"Big Picture" Assignment: Summary and Wrap-Up   **Name:**
Due Date: Tuesday, December 8

We've covered a lot of ground this semester. Think back over the various topics we've covered and concepts you've learned.

Identify the three concepts you learned which are the most important to marketing of high-tech products. Elaborate.

Which speakers were most useful? Why?

Create a one-page schematic to organize the topics/concepts we covered this semester, to better identify their inter-relationships and effects on each other (turn one in to me).