Fall 9-1-2001

MKTG 495.02: Marketing of High-Technology Products and Innovations

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Required Reading Packet and Notes: Available at the UC.

Course Objectives: Marketing of high-technology products occurs in turbulent environments, and requires rapid decision making with incomplete information. Innovations are introduced at frequent intervals, research-and-development spending is vital, and there are high mortality rates for both products and businesses.

This class will explore concepts and practices related to marketing in this unique, fast-paced environment, including the following:

- the defining characteristics of high-technology industries
- different types and patterns of innovation, and their marketing implications
- the need for (and difficulties in) adopting a customer-orientation
- tools used to gather marketing research/intelligence in technology-driven industries
- use of strategic alliances and partnerships in marketing technology
- adaptations to the “4 p’s”
- regulatory and ethical considerations in technological arenas.

Rather than focusing on a specific high-technology industry, the class is designed to explore a range and diversity of industries and contexts. However, because a large majority of such high-tech products are used by business customers (as opposed to consumers in personal households), many of the underlying principles for this class will draw from theories of business-to-business marketing, modifying them as appropriate for the high-tech environment. Issues for both small and big business will be addressed.

The course will provide a balance between conceptual discussions (based on readings of concepts and practices) and applied/hands-on analysis (industry analyses, cases, guest speakers, and a semester project).

Pre-Requisite: The pre-requisite for this course is a Principles of Marketing course. 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.
Educational Philosophy: "I hear and I forget; I see and I remember; I do and I understand"
--Chinese Proverb

This statement captures my educational philosophy very well. I believe that a classroom environment which stimulates active learning will enhance understanding, retention, and future utilization of the material. As such, this course will utilize a variety of tools, including 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 actively participate, to be involved, to come to class prepared to learn.

This philosophy also mirrors the mission statement of the Business School:
"The faculty and staff of the School of Business Administration at The University of Montana-Missoula are committed to excellence in innovative experiential learning and professional growth through research and service."

Course Requirements: (Each is explained below in detail)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Percentage</th>
<th>Points</th>
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<tbody>
<tr>
<td>Industry Presentation</td>
<td>17%</td>
<td>100</td>
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<tr>
<td>Or Case Presentation</td>
<td>17%</td>
<td>100</td>
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<tr>
<td>Class Participation</td>
<td>17%</td>
<td>100</td>
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<tr>
<td>Semester Project</td>
<td>26%</td>
<td>150</td>
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<tr>
<td>Two Exams</td>
<td>34%</td>
<td>200</td>
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<tr>
<td>Current Events Presentation</td>
<td>6%</td>
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<td><strong>Totals</strong></td>
<td><strong>100%</strong></td>
<td><strong>585</strong></td>
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Code of Conduct: I assume that students are familiar with the Student Conduct Code, especially as it pertains to academic misconduct. Please note that it is a form of academic misconduct to submit work that was previously used in another course.

Semester Project (150 points): Students will work in groups of 3-5 and will select an actual firm with a high-tech marketing problem. See the hand-out on semester projects in your class packet.

You will need to identify your group and topic for your paper by Sept. 18. A proposal for the topic of your paper is due by Sept. 27. The proposal for the projects will need to be specified in some detail so that I can ascertain the appropriateness and scope of the problem you will be working on. I am happy to advise you on these projects (i.e., discussing the idea, looking at outlines, etc.)—just ask.

Each team member will submit a confidential peer evaluation of the other members of the group. Roughly 10% of your grade will be based on this peer evaluation.

The final papers will be due at the end of the final exam period, 5 p.m. December 17.

Although paper length is not a big concern to me (rather, quality of your paper is my concern), I would envision most of these projects to be in the 25-30 page length, with Bibliography (suggested format below) Figures/Charts, Appendix, etc.

Remember that this is a project for your High-technology Marketing class, so you should definitely include class concepts and clarify the implications for marketing as you write your paper.
**Industry –or- Case Presentations** (100 points): Students will work in groups of four-five (depending upon the number of students in the class) to develop industry presentations which provide an overview of your high-tech client’s industry. Presentations should be roughly 20 minutes, with 10 minutes for Q&A from the class to follow. See the page in your class packet for more detail.

*Please have formed your groups and identified an industry by Tuesday, Sept. 18, when I will pass a sign-up sheet.* The dates for the presentations by each group are listed on the outline, p. 6.

Each team member will submit a confidential peer evaluation of the other members of the group. Roughly 10% of your grade will be based on this peer evaluation.

**Exams** (100 points each): Exams will include a mix of multiple choice questions, asking for factual knowledge about the readings and material covered during the semester, and essay questions, focusing on your ability to integrate, synthesize, and critically interpret the material. Other short answer questions will be application in nature, asking you to apply your knowledge to analyze and solve a particular firm's marketing problems.

* * No late exam or make-up will be given. * *

**Class Participation** (100 points): In order to stimulate active learning, class time will be heavily discussion-oriented. Obviously, the quality of a discussion class is a function of the quality of each student’s preparation.

*I am most interested in your ability to demonstrate learning of class concepts* (from the readings), which could include description/elaboration on concepts in readings (for example, see suggested discussion questions in class packet), an application of class concepts to current events (i.e., show how class concepts relate to current events, or analyze current events in terms of class concepts), and/or a critical assessment of class concepts (i.e., conditions under which they would be more or less useful, and why). Because we are here for the purposes of learning, it is entirely appropriate to ask provocative questions as part of the learning process.

*My evaluation stresses the thoughtful, meaningful contributions to class discussions and not the quantity of participation per se.* Quality participation is based on the quality of the insights exhibited, the student's ability to maintain continuity of discussion (i.e., pays attention to existing discussion/prior comments) and answer follow-up questions (which requires some degree of thought about the material—above and beyond mere reading--prior to class). 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.
Current Events Oral Presentation: (35 points) The objective of the presentation is, first and foremost, to provide students an opportunity to practice and hone their public speaking skills. Secondly, the presentation gives each student the opportunity to apply a class concept to a particular firm or industry. Third, the student gains exposure to various trade publications in the course of selecting the article for their presentation.

Each student will select a topic on which they will give a 5-minute oral presentation. A sign-up sheet will be passed the first week of class. Students will select a topic for their presentation and a corresponding presentation date. No make-up orals are scheduled.

For the oral presentation, the student should find an article that describes how a company or an industry is utilizing a particular marketing tool or class concept in its business marketing strategy. I do not recommend reviewing an article that provides a generic list of concerns on a particular topic (i.e., 10 things to consider in telemarketing). During the 5-minute oral presentation, the student should:

a. provide a brief summary of the article (1 minute)
b. specifically identify and discuss how the article relates to class concepts (2 minutes)
c. provide a critical analysis of whether or not the strategy described in the article is being appropriately used, given your understanding of the strategy based on class concepts (2 minutes). For example, you may come to the conclusion that IBM needs to work on its customer relationships by improving communication with its dealers, and merely advertising its commitment to a customer-focus will be insufficient.

In your critical analysis, please show an ability to offer specific suggestions for improvement, based on the class concepts you have identified in (b) above.

Each student must turn in a copy of the article to me the day prior to their talk, along with a 1-page summary of their presentation.

Grading for the oral presentation:

- 5 points summary
- 10 points specific tie to class concepts
- 10 points critical insight
- 10 points communication style (articulation, voice inflection, eye contact, speaking slowly and clearly, organization of material, etc.)

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35 points TOTAL

Semester Grading: I grade on a normal curve (90+ = A, 80-89=B, and so forth). Your final letter grade in the class is based upon the distribution of total points at the end of the semester.
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 me in an awkward position by even asking—it is not fair to me or your peers.

Tentative Course Outline of Dates/Topics

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>Tues. Sept. 4</td>
<td>Introduction: Characteristics of High-Tech Environment</td>
<td>1</td>
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<tr>
<td>Thurs. Sept. 6</td>
<td>Types of Innovation</td>
<td>1 (Cont.)</td>
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<td><strong>Sign up for Current Events (individual) presentations</strong></td>
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<tr>
<td>Tues. Sept. 11</td>
<td>Strategy and Corporate Culture in High-Tech Firms</td>
<td>2</td>
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<tr>
<td>Thur. Sept. 13</td>
<td>(Cont.)</td>
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<tr>
<td>Tues. Sept. 18</td>
<td>Relationships and Alliances in High-Tech Firms</td>
<td>3</td>
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<td></td>
<td><strong>Group sign-up for semester projects/industry presentations</strong></td>
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<tr>
<td>Thur. Sept. 20</td>
<td>(Cont.)</td>
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<td><strong>Packet Reading:</strong></td>
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<td></td>
<td>“Re-thinking the Internet”</td>
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<td>Tues. Sept. 25</td>
<td>Market/Customer Orientation and R&amp;D/Marketing Interaction</td>
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<tr>
<td>Thur. Sept. 27</td>
<td>Overview of Web page development</td>
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<td></td>
<td><strong>Proposals for semester projects due</strong></td>
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<td>Tues. Oct. 2</td>
<td>High-Tech Marketing Research Tools</td>
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<td>Thur. Oct. 4</td>
<td>High-Tech Customer Behavior</td>
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<td>Tues. Oct. 9</td>
<td>Film: Crossing the Chasm</td>
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<td>Thurs. Oct. 11</td>
<td>Exam Review</td>
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<td><strong>Packet Reading:</strong></td>
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<td>3G Telecomm</td>
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<td>Tues. Oct. 16</td>
<td><strong>EXAM 1</strong></td>
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<td>Thur. Oct. 18</td>
<td>Product Development and Management in High-Tech Firms</td>
<td>7</td>
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<td>Tues. Oct. 23</td>
<td>Intellectual Property Issues</td>
<td>7 (Cont.)</td>
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<td>Thur. Oct. 25</td>
<td>Group Industry Presentations</td>
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<td>Tues. Oct. 30</td>
<td>Group Industry Presentations</td>
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<td>Thurs. Nov. 1</td>
<td>Distribution Channels in High-Tech Markets</td>
<td>8</td>
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<td>Tues. Nov. 6</td>
<td>Adding Internet Distribution Channels</td>
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<td>Thurs. Nov. 8</td>
<td>Pricing Considerations</td>
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<td><strong>Packet Reading:</strong></td>
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<td>M-commerce</td>
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<td>M-commerce</td>
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Tues. Nov. 13  Advertising and Promotion
Thur. Nov. 15  (Continued)

Tues. Nov. 20  Group Industry Presentations
Thurs. Nov. 22  Happy Thanksgiving

Tues. Nov. 27  Internet Marketing and e-Commerce
Thur. Nov. 29  (Continued)
               1 Industry Presentation

Tues. Dec. 4  Ethical and Regulatory Issues
Thur. Dec. 6  Big Picture Assignments/Exam Review
               Industry Presentation

Tues. Dec. 11  Exam II
Thur. Dec. 13  Project Day – Must come to class first.

Final Projects Due:  End of the final exam period, 5:00, Monday, December 17, in my office.

Packet Readings:


Peer Evaluation Form--Semester project: Confidential

Please specify (in terms of percentages) the relative allocation of work/effort/commitment that you and your partner devoted to your project. The percentages must sum to 100%. For example, if each partner devoted an equal amount of effort to the project, assign each partner 50%.

<table>
<thead>
<tr>
<th>Percentage Allocated</th>
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<tbody>
<tr>
<td>My Name: ___________________________</td>
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<td>Partner1: __________________________</td>
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<td>Partner2: __________________________</td>
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<td>Partner3: __________________________</td>
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<tr>
<td>Partner4: __________________________</td>
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<tr>
<td>Total: 100%</td>
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</tbody>
</table>

Peer Evaluation Form—Industry Presentation/Case Analysis: Confidential

Please specify (in terms of percentages) the relative allocation of work/effort/commitment that you and your partners devoted to your group presentation. The percentages must sum to 100%. For example, in a two-person group, if each partner devoted an equal amount of effort to the project, assign each partner 50%.

<table>
<thead>
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