

Pharmaceutical Economics and Management (HLTHMGMT 409)

<https://courses.fuqua.duke.edu/2011/fall2/hlthmgmt409/>

Faculty

- George Abercrombie, RPh, MBA, former President & CEO of Roche North America
- Margaret Kyle, PhD, professor at Toulouse School of Economics in France
- Jeff Moe, PhD, former pharmaceutical executive and now Duke professor
- David Ridley, PhD, assistant professor of strategy and economics at Duke
- Kelly Munroe, MBA 2012, teaching assistant

Course Overview

We will apply the tools of economics and management to address challenges faced by managers and policy makers in the pharmaceutical sector. We will begin each class by discussing a case. We will use “cold calling,” to draw on the expertise and preparation of all those in the room. We will integrate current events throughout class discussion. We will conclude each class with additional insights from economics and management.

The faculty members have experience as pharmaceutical executives and as researchers who have received support from pharmaceutical manufacturers. These experiences can provide valuable insights, but also are potential sources of bias. We genuinely hope to encourage a vigorous discussion about the industry and welcome diverse views.

Materials

We will read cases from the course pack and supplemental articles from the course web page: <https://courses.fuqua.duke.edu/2011/fall2/hlthmgmt409/>

For those with less background in the pharmaceutical sector, the following web page includes optional readings: <http://faculty.fuqua.duke.edu/~dbr1/teaching/background.html>

Grading

- 1/3 Participation (class discussion, including course board)
- 2/3 Term paper (may include evaluation by team members if applicable)

Term Paper

Each person will be assigned to a team for the term paper. We will survey students at the end of the class regarding co-authors' contributions both in terms of input and output.

The paper topic should be about pharmaceutical strategy. The focus should be on a single firm (for example, GlaxoSmithKline), agency (Centers for Medicare and Medicaid Services), or organization (World Health Organization). The paper should include thoughtful analysis, rather than simple descriptions and lists of facts. It should provide a clear understanding of a problem, the major options available, and a way of accomplishing the solution.

Good papers commonly range from 1,000 to 10,000 words. It is possible to write a poor paper with more words and a good paper with fewer.

Some data options are described on the course web site (click "Data"). Also posted are papers written by students from previous years (click "Past Papers").

Quantitative analysis should be used when appropriate. This might involve existing data or it might involve forecasts using logical, explicit assumptions. For example, in our research we estimated the market for generic biologics before any reached the market, based on the generic pharmaceutical market and expected differences in entry costs. Likewise, many consulting interviews feature questions such as the U.S. market for men's razor blades, so start with the population of the United States, then take the fraction that are men of age to shave, ...

The paper should include the following sections:

- Cover page. On page 1 include paper title, authors, acknowledgments, whether the material was submitted in other contexts (work or class), and whether the paper may be shared with others.
- Executive summary (i.e., abstract). On page 2 summarize the paper (including strategic recommendations) in 300 words or fewer.
- Issue statement. Identify the firm's problem or opportunity.
- Background. Provide information that is relevant for the specific firm or agency.
- Capabilities. Identify the key qualitative and quantitative capabilities that the firm or agency must use or develop. Be specific about capabilities that are relevant for the issue, rather than a general assessment.
- Recommendations. Outline specific actions for leadership. The set of actions should address the quantitative and qualitative issues identified in the capabilities section.
- Implementation. Review how long and in what order the firm or agency should implement the recommendations, what resources are needed to implement the recommendations,

which people will be responsible for implementation, and what incentives and information will be needed to ensure that people implement the plan.

- Conclusion. Include summary, caveats, and broader implications (beyond the firm or agency in question).
- References. Include a list of papers cited in order to credit other authors and to help the reader identify further reading.

Term Paper Schedule

Date	Due	Item
11/3	On the 3 rd day of class	Team assignments announced
12/5	Before the 11 th class	Term paper slide due. Please send the teaching assistant a single slide with 24-point font or greater listing the paper title, authors, and tentative conclusions.
12/8	During the 12 th class	Teaching assistant will share the term paper slides
12/11	On the Sunday after the last class (by midnight)	Term paper due

Schedule

	Class	Date	Faculty lead	Topic	Case
What	1	10/27	Margaret	Filling the pipeline	Vertex Pharmaceuticals: R&D Portfolio Management
	2	10/31	Margaret	Licensing, alliances, and acquisitions	MorphoSys AG: The Evolution of a Biotechnology Business Model
Where	3	11/3	Margaret	Emerging and developing markets	Viagra in China: A Prolonged Battle over Intellectual Property Rights
	4	11/7	Margaret	Developed markets outside the U.S.	Gilead: Launching Truvada in Europe
How	5	11/10	Jeff	Pricing	Launch Pricing Nexium
	6	11/14	Jeff	Launch	Merck: Pricing Gardasil
	7	11/17	David	Reimbursement in the United States	See course web site
	8	11/21	David	Lifecycle management	Pharmaceutical Switching
	9	11/28	David	Generics	Teva Pharmaceuticals, Ltd
	10	12/1	George	Compliance	Success at What Cost: A Case in Managerial Ethics
Who	11	12/5	George	Capabilities and talent management	Global Talent Management at Novartis
When	12	12/8	Jeff	Future	See course web site