



Economics and Management of the Pharmaceutical and Biotechnology Industries

Course Number

B30.2112.U1 ECON&MGMT:PHARM & BIOTECH

Term

Summer 2020

Course Length and Credit

This is a half-semester (accelerated) course for 1.5 credits. This course can be used to meet requirements for the MBA Strategy specialization

Time & Place

Accelerated Course (18 hours)

Saturday August 22, 2020; 9AM – 4PM

Monday, August 24, 2020; 6PM – 9PM

Wednesday, August 26, 2020; 6PM – 9PM

Saturday, August 29 2020; 9AM – 4PM

Instructor

Dennis B. Liotta, MD, MBA

Adjunct Professor

Teaching Assistant

None

Course Pre-requisite

None

Course Summary

This course offers the student an overview of the economic structures, management and policy issues that drive and challenge the pharmaceutical and biotechnology industries. The focus of this course is to give the student the insight into these dominant health care industries in their business transformation in an environment of health care reform.

Course Objectives

The objectives of the course will include: cost structure of these dominant market players; a focus on the management and economics of the powerful R&D process and its relationship to an ever-changing technological environment and innovation dominance; the explosive growth of the biologic and genomics markets, and; the interconnectivity of the pharmaceutical and biotechnology industries. Discussion will also include the role of government regulation on these industries, as well as the ethical issues and challenges these industries face. The course will highlight the role of these industries in a global marketplace.

Text, Required Readings and Case Studies

There is no textbook for this course. The class presentation slides are detailed enough to act as the resource for this course. There shall also be an array of select articles and other readings along with case studies that will be used and shall be the hallmark of this course. Some shall be given prior to the class; the others will be given out during the class. Required readings and case studies will either be posted or distributed prior to corresponding class. There will be no quizzes. Although students are

required to be prepared with their readings or case studies for each class, this course is not designed to overburden students, but to enhance their learning ability. Students recognized as not being prepared will lose points associated with their class participation score.

Course Completion Requirements

Attendance:

Mandatory for all sessions

Please note: That all students are expected to be at every class according to Stern policy that states, “Students may not register for an intensive class if they anticipate missing even one session. If they have questions about the policy, please refer them to the MBA Academic Affairs office. Additionally, the student must arrive to class on time and stay to the end of the class period. Arriving late or leaving class early will have a negative impact on a student’s grade. All these factors will negatively affect the student’s final grades”.

Class participation

20%

Term final exam

80%

Please note: Due to the intensive nature of the course, there will only be no papers or other tests required other than a final exam. The exam is intended to assess the student’s knowledge of the key concepts contained within the course materials presented. The final examination is derived from the entire slide deck that will be presented and distributed to the students, as well as all readings assigned prior to or as part of a class session.

Course Syllabus

Session	Topic	Sub-topics
1	The Global Appetite for Drugs and Medical Technologies	Drivers Behind the Industries: The Healthcare Imperative Descriptions and Definitions of the Industries The Differences Between the International Market and US Markets Economic Dynamics (Markets and Supply Chain) Healthcare Reform Issues and Disparities: Solvency vs. Insolvency
2	Pharmaceutical/Healthcare Technology Companies, Products, Payers and Patients and Business Models, Key Issues and Inherent Problems	Inter-connectivity of the Two Industries
3	Applied Pharmacoeconomics	The Economics of the Industries Pharmacoeconomics 101: The Gamesmanship of Selling and Buying of Prescription Drugs Creating a Pharma Roadmap into the Future Pharma 2030 and Beyond: The Drug Trade and Megatrends Cost-benefit, Effectiveness and Utility Analyses

4	Driving the cost of healthcare up through technology innovation Comparative and Competitive Technology	The Rising Demand for Healthcare Technology: A New Age R&D Strategy Biologic and Genomic Explosion Health Information Technology The cost benefit and utility analysis of the biotech business
5	The New Era of Industry Regulation .Doing Business with Government Programs	The Cost of Doing Business Drug Regulatory Affairs Medicare Part D Regulation & Policy Clinical Research Regulation & Ethics
6	Predicting the Future	Final Class: 1. Open class discussion based on prepared research, viewpoints and arguments. 2. Final Exam

Please note: Since these industries are fluid and there are government changes that play a dynamic role in these industries, the professor retains the right to make changes to parts of the syllabus as a direct reflection of those changes.