

# Biotechnology Residential Syllabus (MGV 490)

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## **Instructor**

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## **Office Location**

UC Davis Graduate School  
of Management

## **Course capacity**

80 students

## **Course Overview**

The Biotechnology Residential course introduces the students to many facets of the biotechnology industry and provides a framework for understanding the complex forces that shape and drive it. In this course, the students will be introduced to the field of Healthcare Biotechnology. Students will hear from leaders in the biotechnology industries and understand the business context within which companies operate and learn about the management and operation of these businesses. During the three days of Biotechnology Residential the students

1, will be introduced to field of biotechnology,

2, will hear from a senior executive from a Biotechnology Pharmaceutical company on its product portfolio, product development process and challenges and opportunities in the development of a biotechnology pharmaceuticals,

3, will hear from a senior executive on the best practices in business processes such as strategic product development and portfolio management

4, will hear from a clinician on implementing biotechnology in healthcare and importance of digital health.

## **Learning Objectives**

Biotechnology has disrupted the life sciences industry, especially the diagnostics and therapeutic industries. In addition to technical knowledge in managing this evolving industry, it will require extraordinary leadership and management skills. The objective of this course is for students will gain better understanding of the operation and sustainable practices in the biotechnology industry by direct interaction with industry leaders.

## **Course Structure**

The course will be offered for three days during the Spring quarter. On the day of the class, the student will arrive at designated time and location. Three-day agenda for the Residential will be as follows:

## **Day 1 (June 16<sup>th</sup>)**

**12- 1 PM:** *Registration – Hotel Foyer*

**1-4 PM: Academic session 1:** *Introduction to the Biotechnology Residential course*

*Hemant Vaidya PhD, Director, Biotechnology Industry Immersion, UC Davis Graduate School of Management.*

*Introduction to the field of Biotechnology, Prof. Denneal Jamison-McClung, PhD. Director, UC Davis Biotechnology program.*

**5-7 PM:** *Reception*

## **Day 2 (June 17<sup>th</sup>)**

**8-9 AM:** *Breakfast*

**9AM to 12 PM, Academic session 2:** *Biotechnology therapeutics development: Amgen story. Primal Kaur MD, MBA, VP Global Development, Inflammation Therapeutics at Amgen.*

**12-1 PM** *lunch and Networking*

**1-4 PM, Academic session 3:** *Strategic decision making and Product Development Execution. Maria Villanueva, CPMI, PPMC, VP Program Management Office at Adaptive Biotechnologies*

**4 PM onwards:** *Free time for dinner on your own.*

## **Day 3 (June 18<sup>th</sup>)**

**8-9 AM:** *Breakfast*

**9-12 PM Academic session 4:** *Biotechnology and Digital Health disrupting the Economics of Healthcare. Keisuke Nakagawa MD. Director of Innovation CoLab, UC Davis Medical Center*

**12 noon: End of the Residential**

### **Code of academic conduct**

The students are expected to follow the guidelines established by UC Davis.

See <http://sja.ucdavis.edu/files/cac.pdf>

### **Pre-reading: Text Pak**

**1, Organizational Strategies and Business models: Better Biotechnology**

Harvard Business Press. ISBN-13:978-1-4221-6613-0, 6610BC

**2, Beginning of Biotechnology**

**3, Amgen: Developing the Totality of Evidence for Biosimilars**

## **Assignments**

### **First Assignment from pre-reading**

Review the three articles stated in the pre-reading section. Submit online, one-page summary of each article **before June 12<sup>th</sup>**. (Total 3 pages, double space, Times New Roman font 11)

### **Second assignment**

A 2 to 3-page final synthesis paper that includes the following: (double space, Times New Roman font 11)

**a. What are the important lessons you learned from various speakers?** You can categorize the problems discussed by various speakers any way you want to and explain the types of solutions that were discussed in class for each category of problems. For example, if the problem dealt with supply chains, you should discuss solutions that were presented with respect to supply chains (e.g., usage of technology, supplier contracting processes, building redundancy into the supply system).

**b. Select one speaker who made the most impact on you.** What part of the material covered by the speaker affected you? Explain why.

**c. How does this course affect what you do (or plan to do) in the future?** Be specific in your response.

**This final paper is due on June 20, 2022, by 5 PM.** Please post it online.

## **Grading**

The grading will be **S**, Satisfactory (80 and above points), or **U**, Unsatisfactory (below 80 points)

The grading will be based on

- 1, Submission of the first assignment; one-page summary of each pre-reading (30 points) (10 per article)
- 2, participation and presentation of your team during the Residential (20 points) and
- 3, your final 5-page report of the second assignment. (50 points)