

Subject Description Form

Subject Code	ABCT5108
Subject Title	Investment, Financing and Risk Management in BioBusiness
Credit Value	3
Level	5
Pre-requisite	Nil
Objectives	<ol style="list-style-type: none"> 1. Gain comprehensive insights into the biotechnology and life sciences industry. 2. Develop proficiency in analyzing and managing financial aspects of bioBusiness. 3. Learn to identify and implement business development strategies in bioBusiness. 4. Acquire skills to identify, assess, and manage various risks in bioBusiness.
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a) acquire comprehensive knowledge about the biotechnology industry, including its structure, trends, challenges, and opportunities. b) develop skills in analyzing financial statements, managing budgets, and applying valuation methods in biobusiness entities. c) understand various funding sources for biotech companies, including venture capital, private equity, public funding, and strategic partnerships. d) learn and apply strategies related to market analysis, technology transfer, strategic alliances, and intellectual property management in biobusiness. e) gain the ability to identify, assess, and manage various risks, including regulatory, clinical, and operational, in the biotechnology sector.
Subject Synopsis/ Indicative Syllabus	<p>Module 1: Introduction to Biobusiness (3 hours)</p> <ul style="list-style-type: none"> • Overview of the biotechnology and life sciences industry • Trends, challenges, and opportunities in the biotech sector • Role of finance, business development, and risk management in biobusiness <p>Module 2: Financial Principles in Biobusiness (6 hours)</p> <ul style="list-style-type: none"> • Financial statements analysis • Financial ratios and metrics • Valuation methods for biotech startups and established companies • Budgeting and financial forecasting <p>Module 3: Funding and Financing in Biotechnology (6 hours)</p> <ul style="list-style-type: none"> • Sources of funding for biotech startups and established companies • Venture capital and private equity investments in the biotech sector • Public funding options, including government grants and subsidies

	<ul style="list-style-type: none"> Debt financing and strategic partnerships in biobusiness <p>Module 4: Business Development Strategies (9 hours)</p> <ul style="list-style-type: none"> Market analysis and opportunity assessment in the biotechnology industry Licensing and technology transfer in biobusiness Strategic alliances, mergers, and acquisitions in biotech Intellectual property protection and commercialization strategies <p>Module 5: Risk Management in Biobusiness (9 hours)</p> <ul style="list-style-type: none"> Identification and assessment of risks in the biotech sector Regulatory and compliance risks in biotechnology Clinical trials and drug development risks Risk mitigation strategies and insurance in biobusiness <p>Module 6: Case Studies and Practical Exercises (6 hours)</p> <ul style="list-style-type: none"> Analysis of real-world biotech case studies Group discussions and presentations on selected topics Practical exercises and simulations to apply concepts learned 																																	
<p>Teaching/Learning Methodology</p>	<p>Lectures, Assignments, and Examination</p> <p>Final Examination</p> <ul style="list-style-type: none"> Comprehensive exam including multiple-choice, short answer, and essay-type questions covering all topics, with an emphasis on risk management strategies, financial planning, and valuation methods. A more in-depth case study analysis focusing on mergers & acquisitions, exit strategies, and the role of insurance. <p>Written Assignments</p> <ul style="list-style-type: none"> A written assignment where students delve deep into topics like the role of insurance in BioBusiness, taxation implications, and the regulatory impact on investment decisions. 																																	
<p>Assessment Methods in Alignment with Intended Learning Outcomes</p>	<table border="1" data-bbox="443 1529 1441 1877"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">Percentage weighting</th> <th colspan="5">Intended subject learning outcomes to be assessed</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th>e</th> </tr> </thead> <tbody> <tr> <td>1. Written Assignments</td> <td>50%</td> <td>✓</td> <td></td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td>2. Final Examination</td> <td>50%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Total</td> <td>100%</td> <td colspan="5"></td> </tr> </tbody> </table> <p>Students are allowed to use GenAI tools to support their writing of and essays. If GenAI tools are used to support their essay writings, students must</p>	Specific assessment methods/tasks	Percentage weighting	Intended subject learning outcomes to be assessed					a	b	c	d	e	1. Written Assignments	50%	✓		✓	✓		2. Final Examination	50%	✓	✓	✓	✓	✓	Total	100%					
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	<p>declare the use of such tools and how they have been used in the assessments. It should be noted that submitting a work generated by GenAI, in part or in whole, as your own (even in paraphrased form) constitutes an act of academic dishonesty; it is no different from asking another person to write your assignment or claiming others' ideas as yours.</p>	
Student Study Effort Expected	Class contact:	
	▪ Lecture	39 Hrs
	Other student study effort:	
	▪ Assignment	40 Hrs
	▪ Self-study	40 Hrs
	Total student study effort	119 Hrs.
Reading List and References	<p>1. Keegan, K. D. (2008). <i>Biotechnology Valuation: An Introductory Guide</i>. John Wiley & Sons Ltd. ISBN 9780470511787</p> <p>2. Gruber, A. C. (2009). <i>Biotech Funding Trends: Insights from Entrepreneurs and Investors</i>. Publisher. ISBN: 3527324356</p> <p>3. Rogers, J. (2019). <i>*Strategy, value and risk: Industry dynamics and advanced financial management*</i> (4th ed.). Palgrave Macmillan. ISBN : 9783030219772 (print)</p>	