California State University Channel Islands
Dual Degree: Master of Science in Biotechnology and Master of Business Administration
Stem Cell Technology & Laboratory Management Emphasis

Advising Form: Effective Fall, 2020 (Catalog year 2020 onwards)

Name: _____ ID Number: _____

Term Admitted: _____ Last Updated: _____

The MS Biotechnology and MBA dual degree with Stem Cell Technology & Laboratory Management Emphasis consists of seven parts: MS Biotechnology Prerequisites or MBA Foundations courses (12 units, as required), MS Biotechnology Core (12 units), Stem Cell Technology & Laboratory Management Emphasis courses (13 units), MS Biotechnology Electives (6 units), MBA Core courses (18 units), Common Core Courses (9 units) and MBA Electives (6 units double-counted).

Students must obtain a grade of "C" or better in order for courses to be applied to the MS in Biotechnology and Master of Business Administration dual degree. Students must receive a grade of "B" or better in BINF 500 and BUS 520 to satisfy the Writing Assessment requirement (GWAR) necessary for graduation.

MS Biotechnology/MBA Curriculum	Units	Instit.	Course	Units	Grade	Term	Comments
MS Biotechnology Prerequisites (16 units, as required)							
CHEM 110 Chemistry of Life	4						Or equivalent course
BIOL 201 Principles of Cell & Molecular Biology	4						Or equivalent course
BIOL 300 Cell Biology	4						Or equivalent upper-division course
BIOL 400 Molecular Biology	4						Or equivalent upper-division course
MBA Foundation Requirements (12 units)							
BUS 500 Economics for Managers	3						
BUS 502 Quantitative Methods for Decision Making	3						
BUS 504 Introduction to Accounting and Finance	3						
BUS 506 Principles of Management & Marketing	3						
BUS 508 Business Ethics & Law	3	**WAIVED**					Waived for Dual Degree majors based on BIOL 503
MS Biotechnology Core Requirements (12 Units)							
BINF 500 DNA and Protein Sequence Analysis	3						
BIOL 502 Techniques in Genomics and Proteomics	3						
BIOL 503 Biotechnology Law and Regulation	3						
BIOL 504 Molecular Cell Biology	3						

Stem Cell Technology & Laboratory Management Emphasis Required Courses (13 units)							
BIOL510 Tissue Culture Techniques and Stem Cell Technology	3						
BIOL 512 Advanced Topics in Regenerative Medicine	1						
BIOL 513 Cell Culture Facility Management	3						
BIOL 602 Stem Cell Technology Internship	6						
MS Biotechnology Electives (Minimum 6 units)							
BIOL 500 Intro to Biopharmaceutical Production Operations	3						
BIOL 505 Molecular Structure	4						
BIOL 507 Pharmacogenomics and Pharmacoproteomics	3						
BIOL 508 Advanced Immunology	4						
BIOL 509 Plant Biotechnology	4						
BIOL 516 Clinical Trials and Quality Assurance	**3**						**Required for SCTLM Emphasis**
BIOL 517 Mechanisms of Development	3						
BIOL 518 Advanced Topics in Molecular Cell Biology	3						
BIOL 603 Biotechnology Internship	3						
BIOL 604: Biotechnology Across National Boundaries	2						
BIOL 605: Biotechnology Across national Boundaries Field Trip	1						
BIOL 590 Special Topics	3						
BIOL 597 Directed Study	1						
BINF 514 Statistical Methods in Computational Biology	3						
BME 500 Biological Systems and Biomechanics	3						
BME 501 Fundamentals of Tissue Engineering and Biomaterials	3						
BME 502 Biomedical Instrumentation and Devices	3						
Common Core Curriculum (9 units)							

MGT 471 Project Management	3						
BIOL/BUS 610 Team Project	6						
MBA Core Requirements (18 units)							
BUS 510 Managerial and Organizational Behavior	3						
BUS 520 Strategy and Leadership	3						
BUS 530 Managing Business Operations	3						
BUS 540 Accounting for Managerial Decision Making	3						
BUS 550 The Contemporary Firm in the Digital Age	3						
BUS 560 The Entrepreneurial Manager	3						
MBA Electives (6 units, double-counted)							
BINF 500 DNA & Protein Sequence Analysis	3						
BIOL 503 Biotechnology Law and Regulation	3						

Advising Notes: