

Curriculum Committee Minutes

Curriculum Committee Meeting Roll Call

Date: 4/21/2025

Time: 2:00 p.m. to 4:00 p.m.

Location: NH 215

Call to Order: 2:07 p.m.

Adjournment: 3:28 p.m.

Quorum: 13

☐ Anthony Ababat	☒ Samuel Addington	☒ John Banola	☐ Elizabeth Banuelos	☒ Thomas Berry (Faculty Chair)
☒ Melita Caldwell-Betties	☒ Mary Copeland	☒ Todd Heibel (NURS)	☐ Leticia Hector (Chair)	☐ Kristina Heilgeist*
☐ Denise Knight	☒ Keith Lee	☐ Steven C. Lee	☒ Jessie Lemieux	☐ Breanna Lopez
☐ Kevin Lyons	☐ Micah Martin	☒ David Martin	☐ Jesus Navarro	☒ Maria Notarangelo
☒ Matthew Robles	☒ Jamie Salyer	☒ Rutina Taylor	☒ Janice Wilkins	☒ Vinnie Wu*
☒ Kay Dee Yarbrough	☐ Student Reps. (2)	Nori Sogomonian (DE)		
Guests:	Daihim Fozouni (ENGL)	Dirkson Lee (ESL)	Tim Colbert (ART)	Carol Jones (CHEM)
	Vanessa Thomas	Lucas Cuny (FTVM)	Jessica Gordon (MUS)	

Co-chair - In the event of a tie vote, discussion will be re-opened, followed by a second vote. If the tie still persists, the Curriculum Chair shall cast the deciding vote.

**non-voting members*

Agenda Items

Approval of Minutes	Approval of minutes for February 10, 2025, March 3, 2025, March 24, 2025, and April 7, 2025 – Tabled.
VPI Report	Tabled.
New Business	A. Welcome: Thomas Berry welcomed the committee to one of the final the Curriculum Committee meetings of the semester! B. Informational Items Transfer Degree updates for 2025-2026 to align with Cal-GETC and CCN: Janice Wilkins informed the committee of the transfer degrees scheduled to be aligned by Fall 2025. The Chemistry degree is currently on hold, pending publication of the transfer degree by the Chancellor's Office. Reviewing Upper Division Courses for Bachelor's Degrees Programs (See PDF resource: CCC Upper Division Information): Thomas notified the committee of the PDF that was attached to this week's agenda, detailing how to review upper division courses for a bachelor's degree program. Administrative update COMMST 140: COMMST 140 (COMM 140) recently went through the Cal-GETC process for articulation, but there were updates needed to the course per reviewers' comments. The department has made the suggested changes and will be re-submitting for articulation. Motion to Change label from COMMST 140 to COMM 140: 1st: Jamie Salyer

The Curriculum Committee recommends that the pre-requisites and co-requisites approved be re-evaluated in the next 2-3 years by the appropriate departments/programs to ensure student success.

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	2nd: Todd Heibel 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes C. Action Items a. Course & Program Approval Action Items i. Course Approvals ii. Program Approvals
Announcements and Public Comments	

Course Approval Action Items					
Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
ESL 610	Workforce Preparation for English Language Learners—Language and Customs of the American Workplace	D. Lee	Modification		Motion to approve to bundle ESL 610, 611, 612, and 613. 1st: M. Copeland 2nd: N. Sogomonian 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
ESL 611	Workforce Preparation for English Language Learners - Applying for Employment	D. Lee	Modification		Motion to approve ESL bundle. 1st: D. Martin 2nd: N. Sogomonian 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
ESL 612	Workforce Language Preparation for Entry Level Positions in the Food Service Industry	D. Lee	Modification		
ESL 613	Workforce Language Preparation for Entry Level Positions in the Retail Industry	D. Lee	Modification		

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FTVM 213	Radio and Podcast Operations	K. Lyons	Review		Motion to approve FTVM 213. 1 st : N. Sogomonian 2 nd : M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
MUS 160X4	Commercial Music Ensemble	J. Gordon	New		Motion to approve MUS 160x4. 1 st : T. Heibel 2 nd : J. Banola 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
NURS 140	Vocational to Professional Nurse	R. Kappattil	Modification		Motion to bundle Nursing 140, 150, 151, 160, 161, 250, 251, 260, 261. 1 st : D. Martin 2 nd : T. Heibel 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes Motion to approve Nursing classes. 1 st : R. Taylor
NURS 150	Foundations of Nursing	R. Kappattil	Modification		
NURS 151	Introduction to Medical Surgical Nursing	R. Kappattil	Modification		
NURS 160	Nursing Care of the Childbearing Family and Newborn	R. Kappattil	Modification		
NURS 161	Beginning Medical Surgical Nursing	R. Kappattil	Modification		
NURS 250	Nursing Care of Children and their Families	R. Kappattil	Modification		
NURS 251	Intermediate Medical Surgical Nursing	R. Kappattil	Modification		

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Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
NURS 260	Psychiatric-Mental Health Nursing	R. Kappattil	Modification		2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
NURS 261	Complex Care and Leadership	R. Kappattil	Modification		
STAT 300	Applied Statistical Research and Analysis	M. Caldwell-Betties	New Course		Motion to approve STAT 300. 1 st : D. Martin 2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 301	California Water History	M. Caldwell-Betties	New Course		Motion to approve WRM 301. 1 st : J. Salyer 2 nd : M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 302	Introduction to Water Resources Management	M. Caldwell-Betties	New Course		Motion to approve WRM 302. 1 st : M. Robles 2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes

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WRM 305	Written Communication and Critical Thinking for Advancing Leaders in the Water Industry	M. Caldwell-Betties	New Course		Motion to approve WRM 305. 1st: J. Lemieux 2nd: R. Taylor Motion Rescinded. Motion to Table WRM 305 so ENGL department can update the course. 1st: M. Copeland 2nd: M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 310	Applied and Professional Ethics in the Water Sector	M. Caldwell-Betties	New Course		Motion to approve WRM 310. 1st: M. Robles 2nd: D. Martin 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 315	Technology and Public Administration	M. Caldwell-Betties	New Course		Motion to approve WRM 315. 1st: J. Salyer 2nd: M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes)

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Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
					Abstain: 0% (0 votes) Motion Passes
WRM 320	Strategic Planning in the Water Sector	M. Caldwell-Betties	New Course		Motion to approve WRM 320. 1 st : J. Salyer 2 nd : M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 325	Water Resources Economics	M. Caldwell-Betties	New Course		Motion to approve WRM 325. 1 st : J. Banola 2 nd : D. Martin Motion Rescinded. Motion to table so the ECON department can review. 1 st : M. Copeland 2 nd : J. Lemieux 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 330	Water Law	M. Caldwell-Betties	New Course		Motion to approve WRM 330. 1 st : M. Copeland 2 nd : M. Robles 14 Responses

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					Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 335	Tribal Water Rights	M. Caldwell-Betties	New Course		Motion to approve WRM 335. 1 st : M. Notarangelo 2 nd : D. Martin 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 340	International Environmental Policy	M. Caldwell-Betties	New Course		Motion to approve WRM 340. 1 st : M. Robles 2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 401	Managing Public Organizations in the Water Sector	M. Caldwell-Betties	New Course		Motion to approve WRM 401. 1 st : D. Martin 2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 402	Water Resources Management and the Public Policy Process	M. Caldwell-Betties	New Course		Motion to approve WRM 402.

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					1 st : M. Robles 2 nd : D. Martin 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 420	Human Resources Administration in the Water Sector	M. Caldwell-Betties	New Course		Motion to approve WRM 420. 1 st : R. Taylor 2 nd : D. Martin 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 430	Water Sector Leadership and Diversity	M. Caldwell-Betties	New Course		Motion to approve WRM 430. 1 st : R. Taylor 2 nd : J. Salyer 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 440	Collective Bargaining and Labor Relations	M. Caldwell-Betties	New Course		Motion to approve WRM 440. 1 st : D. Martin 2 nd : R. Taylor 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes)

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Course Approval Action Items					
Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
					Motion Passes
WRM 460	Capital Budgeting and Debt Management Systems – <i>Updated to Water Resources Budgeting and Financial Management</i>	M. Caldwell-Betties	New Course		Motion to change the name from Capital Budgeting and Debt Management Systems to Water Resources Budgeting and Financial Management 1st: M. Notarangelo 2nd: M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes Motion to Approve WRM 460. 1st: D. Martin 2nd: J. Banola 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 490 - <i>Updated to GIS 400</i>	GIS and Data Analysis in Water Resources Management	M. Caldwell-Betties	New Course		Motion to update to Water Resource Management 1st: M. Caldwell-Betties 2nd: M. Notarangelo 13 Responses Absent: J. Wilkins

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Course Approval Action Items					
Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
					Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes Motion to blanket approve all courses with Water Resource Management to Water Resources Management 1st: M. Notarangelo 2nd: D. Martin 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes Motion to approve WRM 490. 1st: D. Martin 2nd: J. Salyer Motion amended to approve WRM 490 with a name change to GIS 400. Motion amended to approve name change from WRM 490 to GIS 400 and the addition of

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Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
					the textbooks to the COR. 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 495	Research Methods in Water Resources Management	M. Caldwell-Betties	New Course		Motion to approve WRM 495. 1 st : D. Martin 2 nd : M. Robles 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 498	Internship in Water Resources Management	M. Caldwell-Betties	New Course		Motion to approve WRM 498. 1 st : R. Taylor 2 nd : D. Martin 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 499A	Applied Research (Capstone) Project in Water Resources Management	M. Caldwell-Betties	New Course		Motion to approve WRM 499A. 1 st : D. Martin 2 nd : R. Taylor 13 Responses

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Course ID:	Course Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
					Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WRM 499B	Comprehensive Written Exam in Water Resources Management	M. Caldwell-Betties	New Course		Motion to approve WRM 499B. 1 st : D. Martin 2 nd : N. Sogomonian 13 Responses Absent: J. Wilkins Aye: 100% (13 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
WST 034	Introduction to Water Resources Management	M. Caldwell-Betties	Inactivation		Motion to inactivate WST 034. 1 st : J. Salyer 2 nd : T. Heibel 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes

Program Tech Review Items				
Program Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
Artistic Glass Blowing Certificate of Achievement – <i>Updated to Artistic Glass and Design Certificate of Achievement</i>	T. Colbert	New Certificate		Motion to update title to Artistic Glass and Design Certificate of Achievement 1 st : M. Robles

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Program Tech Review Items				
Program Title:	Originator:	Proposal Type:	Notes/Comments:	Voting:
				2 nd : N. Sogomonian 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes Motion to approve the Artistic Glass and Design Certificate. 1 st : N. Sogomonian 2 nd : J. Lemieux 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes
Nursing A.S. Degree	R. Kappattil	Modification		Motion to approve Nursing AS Degree. 1 st : M. Copeland 2 nd : M. Robles 14 Responses Aye: 100% (14 votes) Nay: 0% (0 votes) Abstain: 0% (0 votes) Motion Passes

Motion to adjourn at 3:28 p.m.:

1st: M. Notarangelo

2nd: M. Robles

13 Responses

Absent: J. Wilkins

Aye: 100% (13 votes)

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Nay: 0% (0 votes)

Abstain: 0% (0 votes)

Motion Passes

DRAFT

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What Makes an Upper Division Course Differ from a Lower Division Course?

Upper division courses are defined as requiring lower division knowledge and applying that knowledge as demonstrated measures of critical thinking through writing, oral communication, or computation. Upper division coursework may also encompass research elements, workforce training, apprenticeships, internships, required practicum, or capstone projects. Upper division courses typically will have one or more lower division or upper division prerequisites that have been established using content review of the entry skills necessary to be successful as outlined in the California Code of Regulations (CCR), title 5, section 55003.

California Community College Academic Senate Baccalaureate Handbook

Solano College adapted that definition of an Upper Division Course

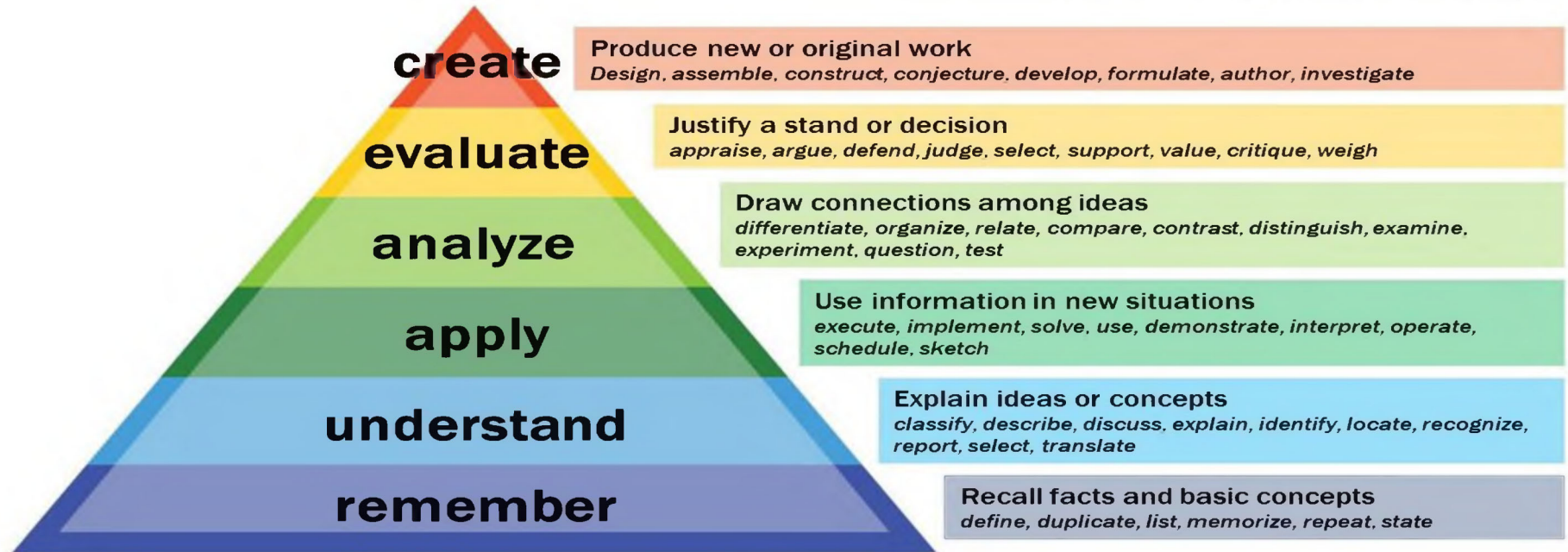
Solano Community College defines upper division coursework as requiring lower division knowledge and applying that knowledge as demonstrated measures of critical thinking through writing, oral communication, or computation, and allow that upper division coursework may encompass research elements, workforce training, apprenticeships, internships, required practicum, or capstone projects. - Solano College Academic Senate

What makes an upper division course differ from a lower division course?

1. Depth/Focus: student outcomes include the development and understanding of the theories and methods of the discipline which may include the applications and limitations of those theories.
2. Specialization: student outcomes include specific intellectual and professional abilities to enable success or progress in a particular field or professional practice.
3. Refinement: student are able to build upon the “general education” background noted above the application of these skills in more discerning or challenging contexts.
4. Preparation: prerequisites may include more general courses, student class standing, GPA requirements, or admission to a pre-professional program.
5. Capstone Courses/Projects: though not necessarily specialized or focused on in-depth study of one discipline, student outcomes may have an integrative function wherein students integrate knowledge from earlier studies.

Bloom's Taxonomy

Bloom's Taxonomy



Student Learning Outcomes Require the Application of Higher Levels of Bloom's Taxonomy

Lower Division Prerequisite Course SLO

1. Describe an overview of the process in the production pipeline for manufacturing a protein pharmaceutical.
2. Outline the business life cycle of a biotechnology company.
3. Outline the structure of the Food and Drug Administration and describe how they assure the safety, efficacy, identity, purity, and potency of a drug or biologic through the enforcement of current Good Manufacturing Practices.

Upper Division Course SLO

1. As the result of this course students will develop the ability to utilize a Quality by Design (QbD) approach to develop a regulatory strategy for a protein pharmaceutical. In this approach students will identify the critical quality attributes (CQAs) of the product, the relationship between the product and the process used to produce it, the quality considerations of the raw materials, and knowledge of the product's clinical properties to design a strategy. Students will identify how a company's different teams - research and development, manufacturing, quality control, and regulatory affairs – team to produce a regulation system. (Bloom's Taxonomy: Create) (Webb's Depth of Knowledge: Extended Thinking)

Student Learning Outcomes Require the Application of Higher Levels of Bloom's Taxonomy

Lower Division Prerequisite Course SLO

1. Describe an overview of the process in the production pipeline for manufacturing a protein pharmaceutical.
2. Outline the business life cycle of a biotechnology company.
3. Outline the structure of the Food and Drug Administration and describe how they assure the safety, efficacy, identity, purity, and potency of a drug or biologic through the enforcement of current Good Manufacturing Practices.

Upper Division Course SLO

2. As the result of this course students will develop the ability to read and critically analyze primary documents from the International Council for Harmonisation (e.g. ICH 7, ICH 8, ICH 9, and ICH 10) and evaluate how the basic science that governs the manufacturing of protein pharmaceuticals led to the design of these regulations.

(Bloom's Taxonomy: Analyze)

(Webb's Depth of Knowledge: Extended Thinking)

Biomanufacturing Upper	
Biomanufacturing Process Sciences (Lecture/Lab) BIOT 401 (5 Units) - Physical and chemical principles of biochemical engineering that enable large cell culture - Thermodynamics and the properties of fluids; mass and heat transfer, fluid flow, and the energy relationships in fluid systems - Biomanufacturing technologies enabling large scale upstream and downstream processes	Supply Chain and Enterprise Resource Planning (Lecture) BIOT 406 (3 Units) - Manage flow of materials in a supply chain - Understand the design, planning and execution of raw material procurement and use - Eligibility for certification test
Design of Experiments for Biomanufacturing (Lecture/Lab) BIOT 402 (4 Units) Established methods to systematically vary process parameters to improve and optimize a biomanufacturing process	Advanced Topics in Quality Assurance and Regulatory Affairs (Lecture) BIOT 407 (4 Units) Study of the harmonized quality system approaches of ICH Q8, 9, 10, and 11, including quality risk management, qualification, and validation
Design of Biomanufacturing Facilities, Critical Utilities, Processes, and Equipment (Lecture) BIOT 403 (4 Units) - An examination of how the robust design of all aspects of a biomanufacturing facility minimizes errors - The role of Quality by Design (ICH Q8) in facility design - Processes and equipment in biological production, recovery, and purification. - Aseptic process design. - Clean utility and support systems	Six Sigma and Lean Manufacturing (Lecture/Discussion) BIOT 408 (4 Units) - Study of key six sigma concepts and tools; the DMAIC phases: design, measure, analyze, improve, and control - Use and implementation of lean tools to reduce waste - Completion of this course prepares students to earn a certification in six sigma.
Bioprocess Monitoring and Control (Lecture/Lab) BIOT 404 (5 Units) The measurement, monitoring, modeling, and control of biomanufacturing processes.	Methods in Quality Improvements, Investigations, and Audits (Lecture) BIOT 409 (4 Units) The study of continuous quality improvement techniques, including investigational methods into process deviations
Emerging Biomanufacturing Technologies (Seminar) BIOT 405 (3 Units) An examination of new technologies in biological production and purification operations.	Emerging Trends in Biomanufacturing Quality (Seminar) BIOT 410 (3 Units) An examination of new regulatory requirements and changes to current practices in biomanufacturing quality