CANNABIS BIOLOGY & CHEMISTRY: ANALYTICAL CONCENTRATION, BACHELOR OF SCIENCE

The major in Cannabis Biology and Chemistry leads to a Bachelor of Science (BS) degree. The major is a rigorous, interdisciplinary degree that has solid foundations in both biology and chemistry. In addition, a variety of supporting and general education courses are available to meet a wide range of interests, backgrounds and needs. The Cannabis Biology and Chemistry program prepares students to enter the workforce as scientists or technicians in a wide variety of different laboratories including agricultural and food, biology, chemistry, environmental science, and cannabis.

The Analytical emphasis leads to a CBC BS degree for those with more interest in chemistry.

Specific Program Requirements

Specific Core Requirements

Course	Title	Credits
BIOL 181	College Biology I/Organismal Bio (GT-SC2)	3.00
BIOL 181L	College Biology I/Organismal Bio Lab (GT-SC1)	1.00
BIOL 182	College Biology II/Cellular Biology (GT-SC2)	3.00
BIOL 182L	College Biology II/Cellular Bio Lab (GT-SC1)	1.00
BIOL 201	Botany (GT-SC2)	2.00
BIOL 201L	Botany Laboratory (GT-SC1)	2.00
BIOL 465	Environmental Toxicology	3.00
CHEM 121	General Chemistry I (GT-SC2)	4.00
CHEM 121L	General Chemistry Lab I (GT-SC1)	1.00
CHEM 122	General Chemistry II (GT-SC2)	4.00
CHEM 122L	General Chemistry Lab II (GT-SC1)	1.00
CHEM 301	Organic Chemistry I	3.00
CHEM 301L	Organic Chemistry Lab I	2.00
CHEM 302	Organic Chemistry II	3.00
CHEM 302L	Organic Chemistry Lab II	2.00
CHEM 311	Biochemistry Survey	3.00
CBC 413	Cannabis Physiology & Growth	3.00
CBC 413L	Cannabis Physiology & Growth Lab	1.00
CBC 463	Medicinal Chemistry & Pharmacology	3.00
CBC 493	Seminar (Seminar)	1.00

Specific Concentration Requirements

Course	Title	Credits
CHEM 170	Academic Orientation	0.50
CHEM 317	Quantitative Analysis	3.00
CHEM 317L	Quantitative Analysis Lab	2.00
CHEM 322	Physical Chemistry II	3.00
CHEM 370	Academic Enrichment	0.50
CHEM 419	Instrumental Analysis	3.00
CHEM 419L	Instrumental Analysis Lab	2.00
CBC 422	Natural Products Extraction & Analysis	3.00
CBC 422L	Natural Products Extraction & Analysis Lab	1.00
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5.00
MATH 224	Calculus and Analytic Geometry II	5.00
PHYS 201 or PHYS 221	Principles of Physics I (GT-SC2) General Physics I	3.00
PHYS 202 or PHYS 222	Principles Of Physics II (GT-SC2) General Physics II	3.00
Advisor Approved Electives		**5-7**
General Electives		**7-11**

Specific Graduation Requirements

Students majoring in Cannabis Biology & Chemistry are required to have a cumulative GPA of 2.000 or better in their chemistry and biology courses.

Planning Sheet

Disclaimer: The Planning Sheet is designed as a guide for student's planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of an academic advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered the institution.

Course	Title	Credits
Year 1		
Fall		
BIOL 181 & 181L	College Biology I/Organismal Bio (GT-SC2) and College Biology I/Organismal Bio Lab (GT-SC1)	4
CHEM 121 & 121L	General Chemistry I (GT-SC2) and General Chemistry Lab I (GT-SC1)	5
CHEM 170	Academic Orientation	0.5
ENG 101	Rhetoric & Writing I (GT-CO1)	3
General Education		3
	Credits	**15.5**
Spring		
BIOL 182 & 182L	College Biology II/Cellular Biology (GT-SC2) and College Biology II/Cellular Bio Lab (GT-SC1)	4
CHEM 122 & 122L	General Chemistry II (GT-SC2) and General Chemistry Lab II (GT-SC1)	5
ENG 102	Rhetoric & Writing II (GT-CO2)	3
General Education		3
	Credits	**15**
Year 2		
Fall		
BIOL 201 & 201L	Botany (GT-SC2) and Botany Laboratory (GT-SC1)	4
CHEM 301 & 301L	Organic Chemistry I and Organic Chemistry Lab I	5
MATH 126	Calculus & Analytic Geometry I (GT-MA1)	5
General Education		3
	Credits	**17**
Spring		
CHEM 302 & 302L	Organic Chemistry II and Organic Chemistry Lab II	5
MATH 224	Calculus and Analytic Geometry II	5

PHYS 221 or PHYS 201	General Physics I or Principles of Physics I (GT-SC2)	4
	Credits	**14**
Year 3		
Fall		
BIOL 465	Environmental Toxicology	3
CHEM 311	Biochemistry Survey	3
CHEM 317 & 317L	Quantitative Analysis and Quantitative Analysis Lab	5
CHEM 322	Physical Chemistry II	3
PHYS 222 or PHYS 202	General Physics II or Principles Of Physics II (GT-SC2)	4
	Credits	**18**
Spring		
CHEM 370	Academic Enrichment	0.5
CHEM 419 & 419L	Instrumental Analysis and Instrumental Analysis Lab	5
General Education		3
Elective [3 credits must be approved by advisor.]		6
	Credits	**14.5**
Year 4		
Fall		
CBC 413 & 413L	Cannabis Physiology & Growth and Cannabis Physiology & Growth Lab	4
CBC 493	Seminar	1
General Education		6
Elective [Must be approved by advisor.]		3
	Credits	**14**
Spring		
CBC 463	Medicinal Chemistry & Pharmacology	3
CBC 422 & 422L	Natural Products Extraction & Analysis and Natural Products Extraction & Analysis Lab	4
Elective [3 credits must be approved by advisor.]		6
	Credits	**13**
	Total Credits	**121**