

# CANNABIS BIOLOGY & CHEMISTRY, POST- BACCALAUREATE CERTIFICATE

CBC 563	Medicinal Chemistry & Pharmacology	3
CBC 593	Seminar	1

The Cannabis Biology and Chemistry Certificate Program is a 9-credit hour certificate program offered at the undergraduate and graduate levels that is housed in the Chemistry Department. The Program is designed for students with a strong biology or chemistry background or students with an undergraduate degree in biology or chemistry to gain advanced coursework relevant to cannabis sciences.

## Specific Admission Requirements

An applicant for the graduate certificate must be admitted as a graduate student and can then complete the certificate in non-degree status. Colorado residents can complete the certificate as guest (for credit) students. If a student decides to later pursue the MS in Cannabis Biology and Chemistry, the student must apply and be accepted to that degree program; credits completed toward the certificate can be applied toward the degree.

## Program Goals

The Cannabis Biology and Chemistry Certificate Program is designed for students with a strong background in Biology and Chemistry who wish to apply these skills and knowledge in the area of cannabis science.

## Student Learning Outcomes

- Students will understand advanced chemical and biological principles applied in these fields and how those principles can be applied to the emerging field of cannabis science.
- Students will understand cannabis physiology and growth, the pharmacological implications, and the practical applications for the industry.
- Students will use contemporary instruments and techniques for studying plant biological and chemical processes.

## Outcomes Assessment Activities

Within the Department's existing assessment structures, the performance of Certificate students in the specific courses will be evaluated separately from other students.

## Specific Program Requirements

A student must complete a minimum of 9 credit hours of CBC coursework at the graduate level for the Certificate. Students may select from the listed courses. A student will receive a Cannabis Biology and Chemistry Certificate after completing 9 credits of the following courses with a grade of C or better.

Course	Title	Credits
CBC 501	Medicinal Plant Biochemistry	3
CBC 513	Cannabis Physiology & Growth	3
CBC 513L	Cannabis Physiology & Growth Lab	1
CBC 522	Natural Products Extraction & Analysis	3
CBC 522L	Natural Products Extraction & Analysis Lab	1