



# Cannabis Biology and Chemistry Degree Program

## College of Science and Mathematics

### Colorado State University-Pueblo

#### **Natural Products Emphasis**

\*Designates new courses

##### **Core Courses (46 credits)**

BIOL 181/181L – College Biology I/Lab (4 credits)

BIOL 182/182L – College Biology II/Lab (4 credits)

BIOL 201/201L – Botany/Lab (4 credits)

BIOL 465 – Environmental Toxicology (3 credits)

CHEM 121/L – General Chemistry I/Lab (5 credits)

CHEM 122/L – General Chemistry II/Lab (5 credits)

CHEM 301/L – Organic Chemistry I/Lab (5 credits)

CHEM 302/L – Organic Chemistry II/Lab (5 credits)

CHEM 311—Intro to Biochemistry (3 credits)

**CBC 413/L\* -- Cannabis Physiology and Growth (4 credits)**

**CBC 463\*—Medicinal Chemistry and Pharmacology (3 credits)**

**CBC 493\* – Seminar (1 credit)**

##### **Other Required Courses (11 credits)**

BIOL 171 – First Year Seminar (1 credit)

BIOL 350 -- Mendelian and Pop Genetics (2 credits)

BIOL 351 – Molecular Biology and Genetics (2 credits)

BIOL 422 – Neurobiology (3 credits)

**CBC 401\* -- Medicinal Plant Biochemistry (3 credits)**

**Advisor Approved Electives (9-11 credits)** At least 6 upper division credits

##### **Support Courses (10-13 credits)**

MATH 126 – Calculus and Analytical Geometry I (5 credits) or MATH 221—Applied Calculus: An Intuitive Approach (4 credits)

PHYS 201-- Principles of Physics I (3 credits) or PHYS 221 – General Physics I (4 credits)

PHYS 202 – Principles of Physics II (3 credits) or PHYS 222 – General Physics II (4 credits)

##### **General Education Courses (24 credits)**

ENG 101 – English Composition I (3 credits)

ENG 102 – English Composition II (3 credits)

History -- 1 course (3 credits)

Humanities – 3 courses (9 credits)

Social Sciences – 2 courses (6 credits)

**General Electives (15-19 credits)** Students are encouraged to take other courses relevant to the subject such as PS223 Criminal Law or SOC 203 Criminal Justice System

**Total Credit Hours - 120 credits**

#### **Analytical Emphasis**

\*Designates new courses

##### **Core Courses (46 credits)**

BIOL 181/181L – College Biology I/Lab (4 credits)

BIOL 182/182L – College Biology II/Lab (4 credits)

BIOL 201/201L – Botany/Lab (4 credits)

BIOL 465 – Environmental Toxicology (3 credits)

CHEM 121/L – General Chemistry I/Lab (5 credits)

CHEM 122/L – General Chemistry II/Lab (5 credits)

CHEM 301/L – Organic Chemistry I/Lab (5 credits)

CHEM 302/L – Organic Chemistry II/Lab (5 credits)

CHEM 311—Intro to Biochemistry (3 credits)

**CBC 413/L\* -- Cannabis Physiology and Growth (4 credits)**

**CBC 463\*—Medicinal Chemistry and Pharmacology (3 credits)**

**CBC 493\* – Seminar (1 credit)**

##### **Other Required Courses (18 credits)**

CHEM 170/370 – Academic Orientation/Enrichment (1 credit)

CHEM 317/L – Quantitative Analysis/Lab (5 credits)

CHEM 322 – Physical Chemistry II (3 credits)

CHEM 419/L – Instrumental Analysis/Lab (5 credits)

**CBC 422/L\* -- Natural Products Extraction and Analysis/Lab (4 credits)**

**Advisor Approved Electives (5-7 credits)**

##### **Support Courses (16-18 credits)**

MATH 126 – Calculus and Analytical Geometry I (5 credits)

MATH 224 – Calculus and Analytical Geometry II (5 credits)

PHYS 201-- Principles of Physics I (3 credits) or PHYS 221 – General Physics I (4 credits)

PHYS 202 – Principles of Physics II (3 credits) or PHYS 222 – General Physics II (4 credits)

##### **General Education Courses (24 credits)**

ENG 101 – English Composition I (3 credits)

ENG 102 – English Composition II (3 credits)

History -- 1 course (3 credits)

Humanities – 3 courses (9 credits)

Social Sciences – 2 courses (6 credits)

**General Electives (7-11 credits)** Students are encouraged to take other courses relevant to the subject such as PS223 Criminal Law or SOC 203 Criminal Justice System

**Total Credit Hours - 120 Credits**