

# CANNABIS SCIENCE AND OPERATIONS (CSO)

## **CSO 1000 - Cannabis Fundamentals: Growing, Manufacturing & Dispensing**

### **Credit(s): 3 Credits**

Cannabis Fundamentals provides students with an overview of the science of growing the cannabis plant, the manufacturing and processing of products from cannabis, and the dispensing of cannabis for medical and therapeutic use. The topics covered in this course include cannabis terminology, a review of the history of the industry, cultural norms, common interactions within the human body. Additionally, students learn about the horticultural principles of growing and harvesting cannabis, equipment, oil extraction techniques, modes of dispensing cannabis, and regulations.

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

## **CSO 1500 - Cannabis Plant Science & Cultivation**

### **Credit(s): 3 Credits**

Cannabis Plant Science and Cultivation introduces student to growing and developing the cannabis plant for use in the pharmaceutical, construction, and agricultural sectors. This course includes plant botany (physiology, structure, genetics, ecology), seed procurement and storage, seed germination, cutting propagation, soil science, water management, plant anatomy identification, growing and flowering stages, and harvesting techniques.

**Prerequisite(s):** CSO 1000

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

## **CSO 1600 - Cannabis Extraction & Product Production**

### **Credit(s): 3 Credits**

Cannabis Extraction & Product Production provides students with information relevant to the extraction and manufacturing of cannabis. Course topics include laboratory safety, basic chemistry concepts, solvent-less extraction, solvent based extraction, cleaning up extractions, final product forms, packaging, testing, equipment sanitation, Missouri food code, good manufacturing practices, inventory management, order processing and security.

**Prerequisite(s):** CSO 1000

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

## **CSO 1700 - Cannabis Compliance & Dispensing**

### **Credit(s): 3 Credits**

Cannabis Compliance & Dispensing will focus on the roles, responsibilities and legal requirements of a dispensary in the distribution of information and products to the consumer. Topics covered include statutory provisions and regulations, types of dispensing operations, personnel, employee training requirements, physical facilities, zoning, security, inventory control, recordkeeping, cleaning and sanitation, consumer rights and responsibilities, efficacy and patient care issues.

**Prerequisite(s):** CSO 1000

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

## **CSO 2000 - Pharmacological Properties of Cannabis**

### **Credit(s): 3 Credits**

Pharmacological Properties of Cannabis introduces students to the chemical characteristics of the cannabis components and the factors that influence drug interaction within the body. Topics covered include receptor theory, chemical absorption, distribution, metabolism, excretion, and dose-response relationships. This course also examines the symptoms treated by cannabis and evidence of the effectiveness of cannabis in treating patients.

**Prerequisite(s):** CSO 1000

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

## **CSO 2010 - Cannabis Law & Entrepreneurship**

### **Credit(s): 3 Credits**

This course explores the cannabis industry through the eyes of the entrepreneur. As a heavily regulated industry, understanding laws and regulations are paramount to a successful career in the cannabis industry. Starting with a solid legal background, students will understand why cannabis is still federally illegal, the risks of traveling with cannabis, and understand the difference between legalization and decriminalization. Students will learn to read and correctly cite regulations, determine what is required to start a licensed cannabis business, including the completion of a mock license application.

## **CSO 2020 - Cannabis Law & Entrepreneurship**

### **Credit(s): 3 Credits**

This course explores the cannabis industry through the eyes of the entrepreneur. As a heavily regulated industry, understanding laws and regulations are paramount to a successful career in the cannabis industry. Starting with a solid legal background, students will understand why cannabis is still federally illegal, the risks of traveling with cannabis, and understand the difference between legalization and decriminalization. Students will learn to read and correctly cite regulations, determine what is required to start a licensed cannabis business, including the completion of a mock license application.

## **CSO 2910 - Cannabis Operations Internship**

### **Credit(s): 1 Credit**

Cannabis Operations Internship I allows students to gain hands-on experience in cannabis growing, manufacturing and/or distribution operations under the direction of industry professionals. This experience may be full time or part-time as required by the industry sponsor.

**Prerequisite(s):** CSO 1000

### **Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

**CSO 2960 - Cannabis Operations and Science Capstone****Credit(s): 1 Credit**

The Cannabis Science and Operations Capstone Course provides an opportunity for students to apply the knowledge gained from their academic studies regarding medical cannabis and CBD through a culminating project. Each student is expected to demonstrate a synthesis and application of the knowledge gained from all courses in the CSO program that will describe how medical cannabis and CBD impact society, history, community, and economics. This course will also allow you to showcase your knowledge, skills, and experience you possess as a professional in the medical cannabis industry. Prerequisite: CSO2000 or by consent of the Program Director.

**Prerequisite(s):** CSO 2000

**Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

**CSO 5000 - Medical Cannabis History, Society and Science****Credit(s): 3 Credits**

Medical Cannabis History, Society and Science establishes the foundational body of knowledge essential to inform the practice of professionals who engage in the work of therapeutic management using cannabis. Topics include: cannabis terminology, societal norms, Missouri's medical cannabis program, forms of medical cannabis (inhalation, vaping, edibles, tinctures, topicals), growing, extraction and distribution, chemistry, metabolism, toxicology, and the ethical uses of medical cannabis therapy.

**Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

**CSO 5100 - Cannabis Pharmacology****Credit(s): 3 Credits**

Cannabis Pharmacology provides a comprehensive examination of the uses, modes of actions and effects of cannabinoids and terpenes within the human body. Topics include: receptor theory, pharmacogenetics, pharmacodynamics, dose-response relationships, drug metabolism, tolerance, dependence, and the endocannabinoid system. Cannabis Pharmacology will also include an analysis on how to review and interpret cannabis related clinical literature.

**Prerequisite(s):** CSO 5000 with a grade of C or higher

**Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

**CSO 5200 - Health Implications and Management Using Medical Cannabis****Credit(s): 3 Credits**

Health Implications and Management Using Medical Cannabis informs health care professionals how to apply clinical and basic scientific knowledge to identify appropriate cannabis therapies to manage approved medical conditions, and as a therapeutic intervention tool for promoting health and well-being. Topics include: a review of conditions treated using medical cannabis, strain selection and dosing, side effects, caring for patients using medical cannabis in a clinic, home and public settings, and ethical and safety considerations regarding a patient's treatment with medical cannabis.

**Prerequisite(s):** CSO 5000 with a grade of C or higher

**Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.

**CSO 5300 - Cannabis Entrepreneurship, Law and Compliance****Credit(s): 3 Credits**

Cannabis Entrepreneurship, Law and Compliance Cannabis Entrepreneurship, Law and Compliance outlines the models and applications of entrepreneurship, innovation, and creativity as they relate to starting and operating a cannabis business. A review of cannabis laws and compliance requirements will be integrated throughout the business development process. Topics include: mission, goals, and objectives of a cannabis business, capital solicitation, business plan and proforma development, regulations of cannabis, rights and restrictions for patients, health professionals, care givers, and employers, knowledge to practice for health care workers, advocacy and impacting policy.

**Prerequisite(s):** CSO 5000 with a grade of C or higher

**Restrictions:**

Enrollment limited to students in the Schl for Professional Studies college.