

## **Colorado State University Pueblo New Certificate Submission to CDHE—February 2025**

### **Institute of Cannabis Research Certificate of Foundational Studies in Cannabis**

**Title:** Institute of Cannabis Research Certificate of Foundational Studies in Cannabis

**CIP Code:** 24.0101 Liberal Arts and Sciences/Liberal Studies.

**Certificate Level:** 01- Less than one year

**Date of approval by governing board:** December 6, 2024

**Number of credit hours:** 16

**Offered as 100% distance/online only?** Yes

**Proposed Effective Date:** Fall 2025

#### **1. Executive Summary**

The Institute of Cannabis Research (ICR) is proposing to implement a Certificate in Foundational Studies in Cannabis, which will be overseen by the ICR with academic policy support provided by CSU Pueblo Extended Studies (ES) and the College of Science, Technology, Engineering, and Math (STEM). The program is expected to launch in fall of 2025 using the ES online delivery mode. As proposed, the program can be completed completely online. The target enrollment for the program is primarily non-CSU Pueblo, non-traditional students with an interest in cannabis as it relates to their engagement with cannabis in medicine, public health, agronomy, chemical analysis, research, and research regulations. It would also serve individuals and organizations associate with the cannabis industry looking for professional development. The program would also educate anyone with a lay interest in cannabis for medicinal or other purposes. The program is expected to grow in demand and revenue-generating capacity as public awareness of the offering increases. Program awareness will be developed through marketing activities conducted by ES, and by the ICR which has an extensive contact list and ongoing engagement with cannabis stakeholders worldwide. This program may also serve as a recruiting foundation for students who may decide to take existing in-person courses from the Cannabis Biology and Chemistry BS and Cannabis Studies minor programs at CSU Pueblo.

#### **2. Department(s)/College(s) involved**

Institute of Cannabis Research at CSU Pueblo CSU Pueblo Extended Studies (ES)  
CSU Pueblo College of Science, Technology, Engineering, and Math (STEM)

#### **3. Justification/Need for program**

ICR is governed by its Colorado state-appointed board, and was assigned the task of

creating this program for the ICR. The ICR and its board answer directly to the Governor and State legislature of Colorado in partnership with the Colorado Department of Higher Education (CDHE). Moreover, since the inception of the ICR, ES, as one of its partners, has received multiple requests per year for an online cannabis certificate as the cannabis industry continues to mature nation-wide. Having this program online allows for a wide range of potential non-traditional students that are not CSU Pueblo students to be enrolled from anywhere in the world. The ICR currently engages a large world-wide academic and professional constituency of cannabis stakeholders who look the ICR as the leader in disseminating current scientific knowledge which guides cannabis activities in our society across a spectrum of topics. The ICR's network of over 6,000 individuals and organizations not only serves as a recruiting base for the proposed program but also has demonstrated strong demand for the program through regular engagement with the ICR's pair of monthly webinar series, annual Cannabis Research Conference, Journal of Cannabis Research, newsletters, and other professional collaborative interactions. Finally, it is likely that this introductory-level program will act as a recruiting conduit for generating new CSU Pueblo students who would engage the CBC BS, and Cannabis Studies minor programs.

#### 4. **Plans for opening the program**

- a. **Plan for recruitment & enrollment** ES partners with Techint Labs, its marketing firm, to market programs. This is included in the current marketing plan for all online programs through ES. ES and Techint Labs would target all ICR partners, all former attendees of the ICR conference, all of the over 6,000 individuals on the ICR contact list, cannabis related companies, cannabis regulators, and cannabis testing firms as avenues for recruitment and enrollment.  
  
Another avenue for recruitment would be to cross-list all ICR credit bearing courses in the certificate program with a non-credit option to provide both a credit and non-credit option to help offset some of the costs for building, instructing, and marketing the program. This has been done in the past in ES and is a successful model. Extended Studies has its own dedicated enrollment counselor to help with recruitment for all online programs. Tuition will be at the regular Extended Studies online rate for both credit and non-credit options.
- b. **Projected enrollments for the first three years** ES seeks to enroll a conservative minimum of 10 students per year in this certificate program with a mixture of certificate-seeking and non-certificate-seeking students. A minimum class size of 4-5 would cover instructional costs.
- c. **Timeline** Course Development and Marketing to begin immediately upon approval. The program will launch in fall 2025.

## 5. Curriculum outline of major courses

The proposed certificate will consist of sixteen credit hours in total; five 3-credit courses and a 1-credit course will be developed. Successful completion of all 6 courses, 16 credit hours, at a grade of C or above will be sufficient for the granting the Foundational Studies in Cannabis certificate. Sixteen credits is the minimum program-level offering required for students to seek title IV financial aid to support their enrollment.

- a. **Introduction to the Scientific Basis for the Regulation of Cannabis:** *Topics could include basic scientific reasons that cannabis products are regulated and sometimes recalled, a summary of the health effects of consuming contaminated cannabis products, the impact of regulation and product recalls on cannabis business, approaches to conducting the cannabis research which underlies regulation, and barriers to conducting cannabis research both historically and going forward. (ICR 101)*
- b. **Basic Human Physiology of Cannabis Consumption:** *Topics could include basics of cannabis biology and physiology including basics of the endocannabinoid system (ECS) and interaction of various phytocannabinoids including THC, CBD, terpenes, and flavonoids with the ECS and other biological targets. (ICR 102)*
- c. **Introduction to the Analytical Chemistry of Cannabinoids and Terpenes:** *Topics could include basic methods of extraction and analysis, current testing and analysis benefits and challenges in industry, etc. (ICR103) APPROVED BY STEM AND CAPB*
- d. **Introduction to Agriculture and Cultivation of Cannabis:** *Topics could include cannabis plant physiology, and cultivation, etc. (ICR 104) APPROVED BY STEM AND CAPB*
- e. **Introduction to Hemp Materials:** *Topics could include basic principles in the manufacture and utilization of hemp-based textiles, building materials, paper, biodegradable erosion matting, etc. Introduction to hemp-based cannabinoid extraction and issues related to the production and sale of hemp-derived intoxicants (ICR 105) NEW COURSE*
- f. **Introduction to Cannabis Science and Research:** *Topics could include cannabis chemistry, biology, medicine, regulation, cultivation, and agronomy. (ICR106) APPROVED BY STEM AND CAPB*

## 6. How the new degree will affect other existing department and/or university programs

The new program will complement the existing Bachelor of Science in Cannabis Biology and Chemistry (CBC), Cannabis Studies Minor, and MS in Cannabis Biology and Chemistry

programs at CSU Pueblo. The new courses could also potentially be used by the above stated programs as electives if desired. In addition, the Hasan School Business and Nursing programs might desire to use some courses as their electives.

**7. Resources already available and/or needed for the first three years, including**

- a. **faculty (full time and adjunct, visiting, etc.)** - As part of a competitive process, the ICR has awarded ES \$15,000 to implement this program including first year instruction. In addition, the ICR Strategic Partnership and Outreach Specialist will work with ES to develop the curriculum, source subject matter experts and instructors, and will serve as a subject matter expert. Revenue earned from this program will sustain long-term growth.
- b. **labs/materials and/or equipment** – The current facilities are adequate.
- c. **facilities** – The current facilities are adequate.
- d. **library resources** –The current library services are adequate.
- e. **graduate assistants (research and/or teaching)** – None
- f. **outreach and/or marketing** – Yes, ES will market the program as part of its ICR grant. Additionally, the ICR will advertise this program on its website and at its annual conferences.
- g. **other, such as accreditation costs if applicable** – None
- h. **other pertinent resource information** – None

**8. Miscellaneous**

**Admission requirements**

Admission to the ICR Cannabis Studies Certificate program at CSU Pueblo. Students must maintain a minimum GPA of 2.0 and meet other CSU Pueblo admissions requirements including payment of an application fee and submission of previous transcripts of credits earned.

**Graduation requirements**

Successful completion of any combination of three courses will be sufficient for granting of the Certificate in Foundational Studies in Cannabis

**Program Educational Objectives**

The objective of the program is to provide entry-level educational experience in cannabis science as it relates to cannabis in society so that its graduates:

- Successfully enter, continue practicing and advance as workers engaged in various aspects of the cannabis including in allied health fields, in agronomy,

testing, materials manufacturing, and as technical employees in the cannabis industry.

- Are informed about the scientifically founded facts about cannabis in the above stated areas.
- Contribute to various cannabis activities in society as well-informed professionals that will engage the field with an objective, scientifically backed knowledge base.

### **Program Student Learning Outcomes**

After completing the certificate, students will be able to:

1. Understand that there is a complex regulatory environment that controls legal cannabis research, production, and distribution Colorado and the US;
2. Have a better understanding of the utilization of hemp materials for manufacturing;
3. Understand the basic principles of cannabinoid testing;
4. Understand the basic physiology of cannabis plant growth and phytocannabinoid production;
5. And will understand the health impacts, both negative and potentially positive of cannabis use in its various contexts as medicine or as legalized recreational drug.