URI Online
Certificate in Cannabis Studies

Overview
The University of Rhode Island Online Certificate in Cannabis Studies, the first of its kind in the United States, is designed to meet the needs of individuals within the cannabis industry who seek specialized skills and a clearer understanding of how to safely and ethically perform their jobs. Gain a foundation in cannabis studies, as well as develop core competencies in natural product separation and analysis, safe product development and manufacturing, and the evaluation of the therapeutic potential of cannabis.

Curriculum
Courses are taught by world renowned faculty and experts in areas including medicinal plants, functional foods research, natural product chemistry, biosynthesis, microbiology, and formulation research and development in the pharmaceutical and nutraceutical industry. You will access state of the art equipment for cannabis chemistry analysis and testing of cannabis related products through virtual laboratory experiences, providing students with a unique online learning advantage from URI’s College of Pharmacy.

The certificate is delivered in asynchronous online, seven-week modules that allows for flexibility to fit your schedule, and the four 3-credit courses can be completed in as little as 2 semesters.

Application Deadline
August 4, 2020

Courses Begin
September 1, 2020

Program Cost
$538 per credit

Fall 2020 applicants will receive an application fee waiver.

There are no textbook costs for this program.

uri.edu/online
URI Online
Certificate in Cannabis Studies

Courses

Foundations of Cannabis Studies*
In this course, students will gain an understanding of the history of cannabis in the United States and the legislation and regulations that continue to shape its medical and recreational use. The ethical issues surrounding cannabis will be explored, and students will learn to evaluate the credibility of various sources of cannabis information. The endocannabinoid system will be introduced in addition to the pharmacology of the major phytocannabinoids, THC and CBD. This course will lay the foundation for the remaining requirements of the certificate in cannabis sciences.

*Candidates must take this course prior to proceeding with the other courses in the certificate. The remaining three courses can be taken in any order.

Cannabis Product Development
Students will be taken through the process of developing a safe cannabis product for therapeutic use. The process begins with extraction and purification of plant material. Analytical testing methods for quantification of cannabinoids and identification of contaminants will be described. Formulation and drug delivery forms will be evaluated. The student will be introduced to good manufacturing practices (GMPs) for the production of safe, reliable therapeutic products.

Cannabis Chemistry and Pharmacognosy
The cannabis plant will be explored through the lens of the natural products it produces. Various cannabinoids, flavonoids, terpenoids, and other classes of natural products will be described. Methods for the extraction and separation of the natural products will be evaluated. Students will be introduced to the biosynthetic pathways that produce the products and form the genetic basis for strain variability. Differences in compound ratios of diverse strains and the effect it has on therapeutic outcomes will be examined. Finally, the entourage effect between the cannabinoids and the other chemical constituents of cannabis will be investigated.

Cannabis Therapeutics
This course will investigate the therapeutic effects of cannabis on various medical conditions by exploring physiology, pathophysiology, and the cannabinoids’ mechanism of action. Evidence-based research and case studies will be used to evaluate the effectiveness of treatment. Side effects, drug interactions, and other risks will be examined. Different routes of administration and the effect on bioavailability will be evaluated.

Application Requirements
Applicants must be 18 years of age or older and submit a high school diploma or GED (transcripts required), two letters of recommendation, a resume/CV, and personal essay. It is strongly recommended that applicants have completed foundational chemistry and/or biology (basic H.S. level or above). Applicants without evidence of this coursework will be encouraged to complete optional modules within the first foundational course to ensure their continued success in the program.

Application Deadline
August 4, 2020

Courses Begin
September 1, 2020

Program Cost
$538 per credit

Fall 2020 applicants will receive an application fee waiver.

There are no textbook costs for this program.

uri.edu/online