



# MEDICAL CANNABIS PROGRAMS

**100% ONLINE**

# MEDICAL CANNABIS PROGRAMS



Two rigorous academic programs:

1. **Master of Science in Medical Cannabis Therapeutics** (MS-MCT)
2. **Medical Cannabis Certificate:**
  - Track A: Medical Cannabis Foundations
  - Track B: Medical Cannabis for Healthcare Professionals



100% online



Combination of live classes and self-paced assignments



Financial aid and VA funding available for those who qualify\*



Pacific College is accredited by WASC

State cannabis reform and impending federal decriminalization are creating a demand surge for qualified cannabis healthcare professionals.

(\*) VA funding currently available for certificate program only. MSMCT pending.

**DID  
YOU  
KNOW?**



- ✓ As of April 15th, 2022, thirty-seven states and four territories allow for the medical use of cannabis products. In addition, as of November 29th, 2021, eighteen states, two territories, and the District of Columbia have enacted legislation to regulate cannabis for nonmedical use.\*
- ✓ States that legalized adult-use cannabis reported a decline in opioid-related emergency department visits (prominently among 25- to 44-year-olds), according to 2021 study by the University of Pittsburgh Graduate School of Public Health.\*\*
- ✓ A comprehensive 2017 report by the National Academies of Sciences, Engineering, and Medicine stated that there was “substantial evidence” that adults with multiple sclerosis-related muscle spasms can use cannabinoid medicines to improve their symptoms, and that “conclusive evidence” existed that cannabinoids were effective at preventing chemotherapy-induced nausea and vomiting.
- ✓ According to a November 2021 Gallup poll, 68% of Americans support cannabis legalization.  
(<https://news.gallup.com/poll/356939/support-legal-marijuana-holds-record-high.aspx>)  
Furthermore, in a 2021 survey by Pew Research Center, 60% of U.S. adults stated cannabis should be legal for medical and recreational use.
- ✓ The legal market is expected to grow from \$3 billion to \$143 billion by 2025, with jobs in the industry exploding from 70,000 to 700,000 in the same period.

This unprecedented societal shift presents opportunities as well as challenges. As more states adopt cannabis laws, more patients will use cannabis, and **more healthcare professionals with knowledge and expertise in medical cannabis are needed to deliver care.**

### Interested in reading more?

#### [Learn More Here!](#)

(\*) source: [www.ncsl.org/research/health/state-medical-marijuana-laws.aspx](http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx)

(\*\*) <https://onlinelibrary.wiley.com/doi/10.1002/hec.4377>

(\*\*\*) [pewresearch.org/fact-tank/2021/04/16/americans-overwhelmingly-say-marijuana-should-be-legal-for-recreational-or-medical-use/](https://pewresearch.org/fact-tank/2021/04/16/americans-overwhelmingly-say-marijuana-should-be-legal-for-recreational-or-medical-use/)

# 10 REASONS TO PURSUE YOUR MEDICAL CANNABIS EDUCATION AT PACIFIC COLLEGE

1.

## TARGETED CAREER OUTCOMES

The Pacific College of Health and Science's (PCHS) Medical Cannabis programs prepare you to thrive in the cannabis industry as healthcare providers, advocates, educators, coaches, or entrepreneurs.

2.

## FLEXIBLE ONLINE SCHEDULE

The programs are 100% online and specifically built for busy professionals like you.

3.

## HOLISTIC-FOCUSED SINCE 1986

As a leader in alternative and complementary and integrative medicine education since 1986, PCHS, formerly known as Pacific College of Oriental Medicine (PCOM), has a long history of emphasizing herbology, holism, and overall patient wellness.

4.

## DESIGNED FOR CLINICIANS

Pacific College's Medical Cannabis programs provide an opportunity for healthcare professionals to bridge the gap between the constantly evolving cannabis industry, and the growing science behind cannabis medicine.

5.

## ACNA SPONSOR

PCHS is a proud sponsor of the American Cannabis Nurses Association.

6.

## WASC ACCREDITATION

PCHS is accredited by the prestigious Western Association of Schools and Colleges' Senior College and University Commission (WASC's WSCUC), which also counts Stanford, the University of California (UC), and many more as its member institutions.

7.

## INTEGRATIVE HEALTHCARE APPROACH

PCHS's deeply knowledgeable faculty follow the integrative healthcare approach. They are trained in the pharmacology of herbs and in the incorporation of medicinal herbs into a patient's allopathic treatment plan.





8.

#### **COLLABORATIVE MINDSET**

You will learn to work in collaboration with other healthcare providers.

9.

#### **TRANSFER CREDITS**

Graduates of the PCHS Medical Cannabis Certificate programs can transfer their credits to the Master of Science in Medical Cannabis Therapeutics (MS-MCT) program.

10.

#### **CANNABIS ELECTIVES**

The Medical Cannabis Certificate courses are also available as electives in PCHS's Holistic Nursing programs.

**STAND OUT  
AS AN EXPERT  
IN THE MEDICAL  
CANNABIS  
SPACE.**



# MEDICAL CANNABIS CERTIFICATE PROGRAM



**3 courses / 8 college credits**



Can be completed in as few as **6 months**



The Medical Cannabis Certificate programs **can also count as electives** towards Pacific College's programs.



## **2 tracks:**

1. Medical Cannabis Foundations
2. Medical Cannabis for Healthcare Professionals



# Medical Cannabis Certificate Program

Learn to coach patients on the therapeutic effects of the medicine, dosing, self-titration approaches, and ingestion methods, while promoting overall health and well-being naturally.

## COURSE DESCRIPTIONS

### Endocannabinoid System and Pharmacology | 3 Credits

- Anatomy and physiology of the human endocannabinoid system
- Pharmacokinetics and pharmacodynamics of medicinal cannabis
- Evidence-based cannabis research
- High-risk populations
- Drug-drug interactions and adverse effects of cannabis use
- Routes of cannabis administration

### Clinical Medical Cannabis Guidelines and Professional Practice | 3 Credits

- Historical, legal, and ethical issues related to prohibition and legalization of cannabis
- Scope of professional practice in the context of medical cannabis patient consultations
- Coaching for patients around the general use of cannabis for pain, mental health, and other health-related issues
- Holistic modalities to upregulate the endocannabinoid system
- Adverse effects of cannabis use

### Cannabis Care Capstone | 2 Credits

Design a practical or professional project that aligns with your goals as a cannabis healthcare professional.

OR

### Cannabis Industry Capstone | 2 Credits

Explore concepts unique to the cannabis industry (size, trends, funding, banking, insurance, licensure, advocacy responsibilities, and opportunities) and build a project that provides clarity for your area of interest within the cannabis space.

# MASTER OF SCIENCE IN MEDICAL CANNABIS THERAPEUTICS PROGRAM



10 courses / 30 college credits



Specifically designed for **clinicians**



Graduates of Pacific College's Medical Cannabis  
Certificate programs can **transfer their credits** to the  
MS-MCT program

# THE MASTER OF SCIENCE IN MEDICAL CANNABIS THERAPEUTICS (MS-MCT) PROGRAM PREPARES GRADUATES TO:

- Enter the cannabis industry as healthcare providers, advocates, educators, or coaches.
- Apply evidence-based, conceptual cannabis knowledge to clinical settings.
- Employ best practices around patient assessment, dosing guidelines, and routes of administration.
- Learn to use cannabis science evidence and holistic approaches to educate, coach, and advocate for cannabis patient populations.
- Be thought leaders in coaching and educating cannabis patients, the general public, policy makers, and the medical community.

## MODEL CURRICULUM

TERM	COURSE TITLE	CREDITS
Term 1	Introduction to Medical Cannabis History and Policy	3
Term 1	Introduction to the Endocannabinoid System	3
Term 2	Therapeutic and Medicinal Uses of Cannabinoids, Terpenes, and Flavonoids	3
Term 2	Advanced ECS and Cannabinoid Pharmacology	3
Term 3	Cannabis Research and Evidence-Based Literature Review	3
Term 3	Ethics, Advocacy, and Public Health: Emerging Issues for Healthcare Professionals	3
Term 4	Adverse Effects, Product Safety, and Patient Recommendation Considerations	3
Term 4	Cannabinoid Therapeutics I: Clinical Applications for Symptom Management	3
Term 5	Cannabinoid Therapeutics II: Clinical Applications for Chronic Conditions	3
Term 5	Capstone	3
	Total	30



# COURSE DESCRIPTIONS



## **Introduction to Medical Cannabis History and Policy**

In this course, students will explore the history of medicinal and recreational cannabis use, including its ubiquitous use in antiquity across multiple cultures and geographical regions. Students will learn about cannabis use in the West and how public policy, cultural movements, and societal factors eventually led to laws in the U.S. intended to prohibit cannabis use. Furthermore, students will learn about the criminalization of cannabis in the twentieth century, an era that was characterized by a dominant anti-drug sentiment in both public opinion and government policy and that is now referred to as the War on Drugs. Emphasis will be given to the exploration of how policies, international treaties, and historical figures influenced the modern regulation of cannabis.

## **Introduction to the Endocannabinoid System**

In this course, students will be introduced to the human endocannabinoid system and will discuss basic anatomy and physiology of the ECS. This course introduces foundational concepts, such as how endogenous cannabinoid ligands bind with receptors and how enzymes metabolize those compounds. The course will also introduce phyto- and synthetic cannabinoids to enable students to assess how these compounds interact with the ECS. Finally, students will learn about clinical endocannabinoid deficiency and how to upregulate endocannabinoid tone.

## **Therapeutic and Medicinal Uses of Cannabinoids, Terpenes, and Flavonoids**

In this course, students will explore healthcare-relevant botany of cannabis plants and facets of cannabis product chemistry and laboratory testing that facilitate better healthcare decisions. Students will learn about the taxonomy of cannabis, common and rare secondary metabolites, and the biosynthetic pathway of those compounds. Furthermore, students will evaluate the evidence supporting the concept of entourage effect and propose potential mechanisms of action. Finally, students will learn about basic techniques used to test cannabis compounds and cannabis products, and students will learn to identify toxins that should not be present in cannabis products.

## **Advanced ECS and Cannabinoid Pharmacology**

In this course, students will build on their understanding of the anatomy and physiology of the endocannabinoid system—including the receptors (their locations throughout the body and their physiological relevance), endogenous ligands, and enzymes that metabolize those ligands—and how those parts work together to facilitate biological homeostasis. A focus of this course will be on advanced concepts related to cannabinoid pharmacokinetics and pharmacodynamics. While the emphasis on this course is not botany, some attention will be given to cannabinoids and other compounds in the cannabis plant that interact with and influence the ECS. For example, students will evaluate how different routes of administration impact the absorption, distribution, metabolism, and elimination of phytocannabinoids. Finally, this course goes beyond the discussion of the cannabinoid receptors and explores how non-cannabinoid receptor mechanisms can influence the ECS.





## **Cannabis Research and Evidence-Based Literature Review**

In this course, students will analyze, synthesize, and utilize cannabis science information and evidence in meaningful and effective ways. This course prepares the learner to support, educate, and coach patients, other healthcare professionals, and the general public with evidence-based information. The learner will focus on the research analysis process and how to create an evidence-based literature review on a healthcare-cannabis science related topic.

## **Therapeutic and Medicinal Uses of Cannabinoids, Terpenes, and Flavonoids.**

As cannabis prohibition evolves into legal regulation, the cannabis healthcare professional must be adequately prepared to address the many ethical, legal, social justice, and public health issues related to emergence of legal cannabis models. In this course, students will explore public health policy related to the regulation of medical and adult use cannabis with an emphasis on how a harm reduction approach might be utilized.

Furthermore, this course will focus on whether the implementation of social equity and diversity and inclusion programs have helped communities and individuals who have been disproportionately impacted by the War on Drugs. Finally, students will evaluate how current and proposed legislation and related ethical questions impact the role of medical cannabis healthcare providers.



### **Adverse Effects, Product Safety and Patient Recommendation Considerations**

This course will discuss the role of pharmacovigilance in cannabinoid therapeutics as it relates to adverse effects, product safety, and patient outcomes. Cannabinoids and cannabis-based medicine can produce adverse drug reactions (ADRs) that can occur unintentionally when taken outside of their therapeutic range. Incidence and severity of ADRs will vary based on cannabinoid, dose, route of administration, age, genetics, comorbidities, other medications, and gender. Students will learn to recognize potential safety risks of cannabinoids and cannabis-based medicines and provide recommendations that minimize those risks based on the latest evidence.

### **Cannabinoid Therapeutics I: Clinical Applications for Symptom Management**

### **Cannabinoid Therapeutics II: Clinical Applications for Chronic Conditions**

These courses will focus on the therapeutic effects of cannabinoids on specific symptoms, conditions, and disease states. Scientific and clinical evidence will be used to support the clinical use of cannabinoids in a safe and effective manner. Students will learn physiology, pathophysiology, and evidence-based treatment strategies for psychiatric, neurological, gastrointestinal, oncological, cardiovascular, immunological, respiratory, and musculoskeletal disorders.



## Capstone

The capstone course is a culminating experience in the MCT program that includes a seminar series and the completion of the student's independent capstone project.

Students will complete an independent project with the guidance of a course instructor. The capstone project enables students to demonstrate mastery of all program competencies by applying theoretical concepts to real-world settings. For example, students might elect to participate in an organizational setting of their choice—a hospital, integrative clinic, community agency or non-profit organization, a cannabis business, and so forth—where they will independently define a problem or opportunity and

determine the information, platform, or technique required to address the problem or opportunity. The capstone project should produce a net-positive difference for the cannabis or healthcare community.

Seminars will focus on professionalism within the medical cannabis industry and will discuss how cannabis industry thought leaders can use transformative change models to develop advocacy and legislative strategies in the medical and adult use cannabis industries. Students will consider specific plans for growth as expert leaders and advocates within the medical cannabis field.


## READY TO APPLY?

If you think a career in medical cannabis is something you would like to pursue, contact us and speak to an admissions representative to get started on your new journey!

**For more information, call (619) 574-0843 or fill out our contact form to be contacted by a Pacific College representative.**



**A full-time student can complete the certificate programs in as few as 6 MONTHS, and the master's program in as few as TWENTY MONTHS.**



# PRACTICAL INFORMATION

## ADMISSIONS REQUIREMENTS

### CERTIFICATE PROGRAMS

- An associate degree or credit equivalency (60)
- English language proficiency
- Note: Pacific College acupuncture students who completed their second year comps are also eligible to enroll

### MASTER'S PROGRAM

- Bachelor's degree in health or science related field -or- 90 credits in related field
- Completion of at least one semester of Anatomy/Physiology -or- a clinical terminal degree -or- program director's permission
- Preferred minimum GPA: 3.0
- Resume or CV
- 300-500-word statement of intent
- English language proficiency



## TUITION AND FEES

### 1. Tuition:

- Certificate: \$455/credit (\$3,640 total tuition)
- MS-MCT: \$530/credit (\$15,900 total tuition)\*\*

### 2. Fees (all students):

- Books and Supplies: Certificate \$300\* / MS-MCT \$1,200\*
- Application Fee (not refundable) (fee waived for US veterans) \$50
- Administrative Fee, per term (not refundable) \$40
- Technology Fee, per term \$150

**Students may defer current Title IV loans while enrolled in the program.**

*(\*) The cost for textbooks and supplies is approximate, based on current requirements and prices. Students are not required to purchase textbooks and supplies from the school.*

*(\*\*) Without potential transfer credits*

## SCHEDULE AND COURSE DELIVERY

The Medical Cannabis programs are offered online, using a combination of live classes and self-paced assignments. For each seven-week course, two to three weeks are comprised of live classes, while the rest is asynchronous coursework with defined outcomes.

**A full-time student can complete the certificate programs in as few as six months, and the master's program in as few as twenty months. Part-time schedule is also available.**

Live classes are delivered in real time, with audio and video connection to faculty and fellow students. The connection among participants is comparable to that of on-site classes with the added benefit of attending from the comfort and convenience of your home.



# PACIFIC COLLEGE'S ONLINE EDUCATION EXPERIENCE

Pacific College of Health and Science has been at the forefront of online education in each of the professions it represents. Forgoing what at the time was standard online education, i.e., PowerPoint slides, reading assignments and online forums (in other words, boring and uninspiring), Pacific College embraced live, synchronous online delivery to replicate the closeness and camaraderie of the on-site educational experience, all while providing the convenience of online education. Students and faculty see and hear each other, share their thoughts and assignments, and work in small groups in real time from the comfort of their home or office.

Pacific College can achieve such outcomes because its online team includes not only the widest variety of subject matter experts, but specialists in online instructional design who work closely with faculty members to ensure the best online educational experience.

## **All classes at Pacific College apply the most relevant tenets of adult education theory:**

1. Adult learners have a role in the content and delivery of classroom knowledge.
2. Adult experiences contribute to learning and enrich the classroom experience.
3. Adults learn best by applying the information they need to learn.
4. Adults need to see the relevance of the knowledge being delivered.

All students have access to the college's extensive electronic library resources, including the Cochrane Library of systematic reviews, the ProQuest Ebooks Central and Nursing and Allied Health databases, plus AltHealth Watch, CINAHL, Medline with full text, and a significant selection of ejournals through EBSCO Host. All these resources can be accessed through the search box at the top of the library's web page. Articles that are not available as full text can be requested through InterLibrary Loan (ILL).

# MEET YOUR FACULTY!

Pacific College has a long tradition of recruiting the most highly credentialed professionals. Your Medical Cannabis faculty members are no exception. Each one of them is an expert and active professional in her or his field.



## **Timothy Byars, Program Director, MS**

Timothy is a researcher, writer, and curriculum developer (with over 20 years of experience writing, editing, and developing content), and has been active in the cannabis industry since 2014. In 2018, Timothy co-founded Radicle Health to address the cannabis education gap in the medical community and to help healthcare professionals understand how to use cannabis and cannabinoid-based medications in their practice. [Click Here to Read More](#)



## **Dr. Carey Clark, Faculty**

### **PhD, RN, RYT, AHN-BC, FAAN**

Carey was one of Pacific College's medical cannabis program co-founder and the former program director. She is now part of the faculty as well as Past President of ACNA, and Editor of the Wolters-Kuhlwer textbook, *Cannabis: A Handbook for Nurses*. Dr. Clark has over 30 publications in journals such as *Advances in Nursing Science*, *International Journal for Human Caring*, *Holistic Nursing Practice*, and *Creative Nursing*. [Click Here to Read More](#)



## **Rachel Parmelee, Faculty**

### **MSN, RN, CNE, AHN-BC**

Rachel began her nursing career in 2008 in Detroit, Michigan at the Rehabilitation Institute of Michigan of the Detroit Medical Center. As a Certified Rehabilitation Registered Nurse, much of her bedside experience was with patients suffering from neurological conditions, mostly in spinal cord injury. [Click Here to Read More](#)



[Click Here to subscribe to our YouTube channel to watch all PCHS medical cannabis-related videos.](#)



**Barbara Ochester, Faculty  
MSN, RN, EdD**

Barbara Ochester began her professional career as a registered nurse over 46 years ago. She built a foundation in bedside nursing while working in the medical/surgical, intensive care, and emergency departments, attaining leadership roles in each of these units. [Click Here to Read More](#)



**Sandra Guynes, Faculty  
ME, MSN, FNP**

Sandra Guynes is a nurse educator with 16 years of experience. She has developed community-based cannabis education programs and advocates for marginalized communities affected by the war on drugs. [Click Here to Read More](#)



**Thomas A. Clobes, Faculty  
PHD**

Thomas A. Clobes holds a B.S. in Biology, another B.S. in Psychology, an M.S. in Administration, another M.S. in Medical Cannabis Science & Therapeutics, and a Ph.D. in Health Sciences. [Click Here to Read More](#)



**Alice O'Leary Randall, Faculty**

Alice O'Leary Randall co-founded the medical cannabis movement in 1976 with her late husband, Robert C. Randall, the first person in the U.S. to legally receive medical cannabis (to treat glaucoma). [Click Here to Read More](#)



**Biyyiah A. Lee, Faculty  
MSN, RN, PAHM**

Biyyiah Lee is a registered nurse in Detroit, Michigan with over 10 years of nursing experience in a variety of nursing settings. [Click Here to Read More](#)



# **ABOUT PACIFIC COLLEGE OF HEALTH AND SCIENCE**





## ACCREDITATION



Pacific College is accredited by WSCUC



The Bachelor of Science of (Holistic) Nursing Degree Program and Postbaccalaureate Holistic Nursing Certificate at Pacific College of Health and Science are endorsed by the American Holistic Nurses Credentialing Corporation (AHNCC) [ahncc.org](http://ahncc.org)



The Bachelor of Science of (Holistic) Nursing Degree Program at Pacific College of Health and Science is accredited by the Accreditation Commission of Education in Nursing (ACEN) [acenursing.org](http://acenursing.org)



Proud sponsor of the American Cannabis Nurses Association

# MISSION

Pacific College improves lives by educating and inspiring compassionate, skilled leaders of traditional medicine and integrative health sciences.

# CORE VALUE STATEMENT & CORE VALUES

All members of the Pacific College community embody the intention of improving lives exponentially by supporting health and well-being through our daily actions. We lead by example and by practicing the values of:

***Integrity • Mindfulness***

***Compassion • Critical Thinking***

***Collaboration • Education***

A hand holding a green leaf against a blurred background of a person's face.

# VISION

Pacific College is the recognized leader in delivering traditional medicine and integrative health science education to practitioners and the public.

Pacific College is a catalyst for the adoption and expansion of traditional medicine and integrative health science principles, practices, and research, empowering individuals to gain and maintain health and enjoy life.

Pacific College is contributing to the transformation of the structure and economics of healthcare by bringing education and integrative health science to where people live, learn, and play.



(619) 332-2841

[PacificCollege.edu/MedicalCannabis](https://PacificCollege.edu/MedicalCannabis)

[Admissions-SD@PacificCollege.edu](mailto:Admissions-SD@PacificCollege.edu)



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