



Certification in Endocannabinoid Medicine

A comprehensive 12-credit continuing education program
developed to address the needs of physicians, nurses,
and pharmacists

AJEM
American Journal of
Endocannabinoid
Medicine

To help bridge the gap in endocannabinoid medical training, Havas ECS has developed the comprehensive Endocannabinoid Learning System which, upon successful completion, confers a total of 12 *AMA PRA Category 1 Credits™* and a Certificate in Endocannabinoid Medicine from the *American Journal of Endocannabinoid Medicine* (AJEM). Licensed nurses and pharmacists may apply to their boards for recognition of *AMA PRA Category 1 Credits™*.

“This Endocannabinoid Learning System is very different from the many training offerings in the hemp-CBD, medical cannabis, and cannabinoid pharma market, in that it was developed with the objective independence and integrity required for Accreditation Council for Continuing Medical Education (ACCME)-accredited education of physicians, nurses, and pharmacists,” said Jahan Marcu, PhD, editor-in-chief of the *American Journal of Endocannabinoid Medicine*.

In keeping with our mission to provide the most up-to-date education on endocannabinoid science, the Endocannabinoid Learning System includes 4 modules that cover the following topics:

- Understanding Cannabinoids, the Endocannabinoid System (ECS), and their Therapeutic Impact
- All About Cannabinoids
- The ECS and Therapeutic Targets
- Cannabinoids in Clinical Practice

To take advantage of the Endocannabinoid Learning System, visit www.ajemuniversity.com.



About *The American Journal of Endocannabinoid Medicine* (AJEM)

The *AJEM* is the first and only American medical authority committed to the scientific study of the ECS and to the evidence-based practice of endocannabinoid medicine.

The objective of *AJEM* is to help educate medical professionals on the role of the endocannabinoid system in homeostasis and identify key receptors that are potential therapeutic targets for medical *Cannabis* and cannabinoid prescription and non-prescription products. *AJEM* University is delivered in partnership with Havas ECS.



About HAVAS ECS

Havas ECS is an education and communications company focused on research and therapeutics relating to the endocannabinoid system. In partnership with the *American Journal of Endocannabinoid Medicine*, Havas ECS offers the only program for earning a Certificate in Endocannabinoid Medicine (CECM).

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This learning module is designed to introduce any interested healthcare professional or non-healthcare professional to the endocannabinoid system (ECS) and its potential therapeutic impact.

Course Level 200

Deeper Understanding: All About Cannabinoids

This module provides a deeper dive into key endocannabinoids, phytocannabinoids, and cannabinoid products, including those that have been approved by various regulatory agencies and others in development.

Course Level 201

Deeper Understanding: the ECS and Therapeutic Targets

This module presents a deeper understanding of the ECS and its key receptors.

Course Level 202

Clinical Considerations: Cannabinoids in Clinical Practice

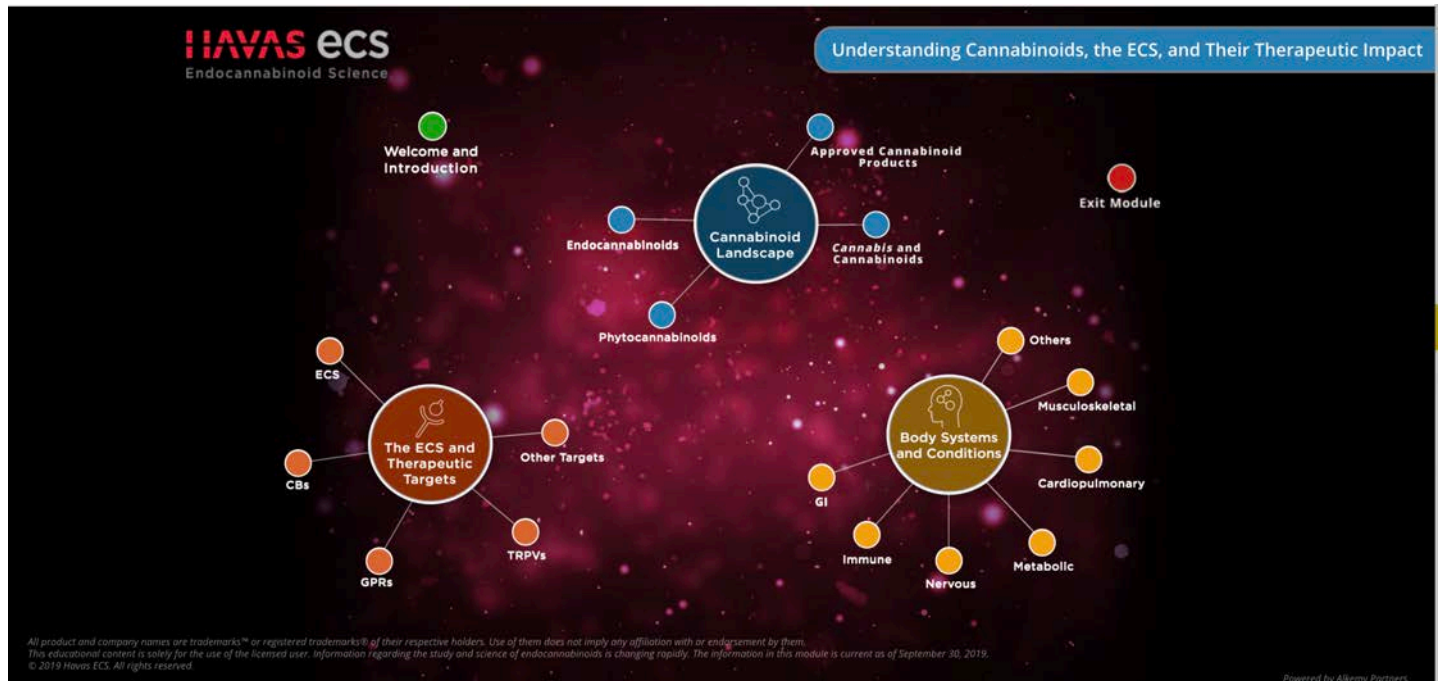
This module provides a deeper understanding of how to best integrate cannabinoids into clinical practice. Topics covered include but are not limited to routes of administration, dosing and titration, potential adverse reactions, and drug-drug interactions, to help guide clinicians in their cannabinoid treatment decisions.

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Course Level 100: Core Module

Understanding Cannabinoids, the ECS, and Their Therapeutic Impact



This interactive learning module is designed to introduce any interested healthcare professional or non-healthcare professional to the ECS and its potential therapeutic impact. Participants will become acquainted with endocannabinoids, phytocannabinoids, and approved cannabinoid therapeutic products, as well as ECS targets.

The module will also familiarize participants with body systems that are affected by the ECS and the conditions that are most impacted by it, while establishing the therapeutic potential of cannabinoids that target these systems. This gateway module sets the stage for other courses in our learning library that:

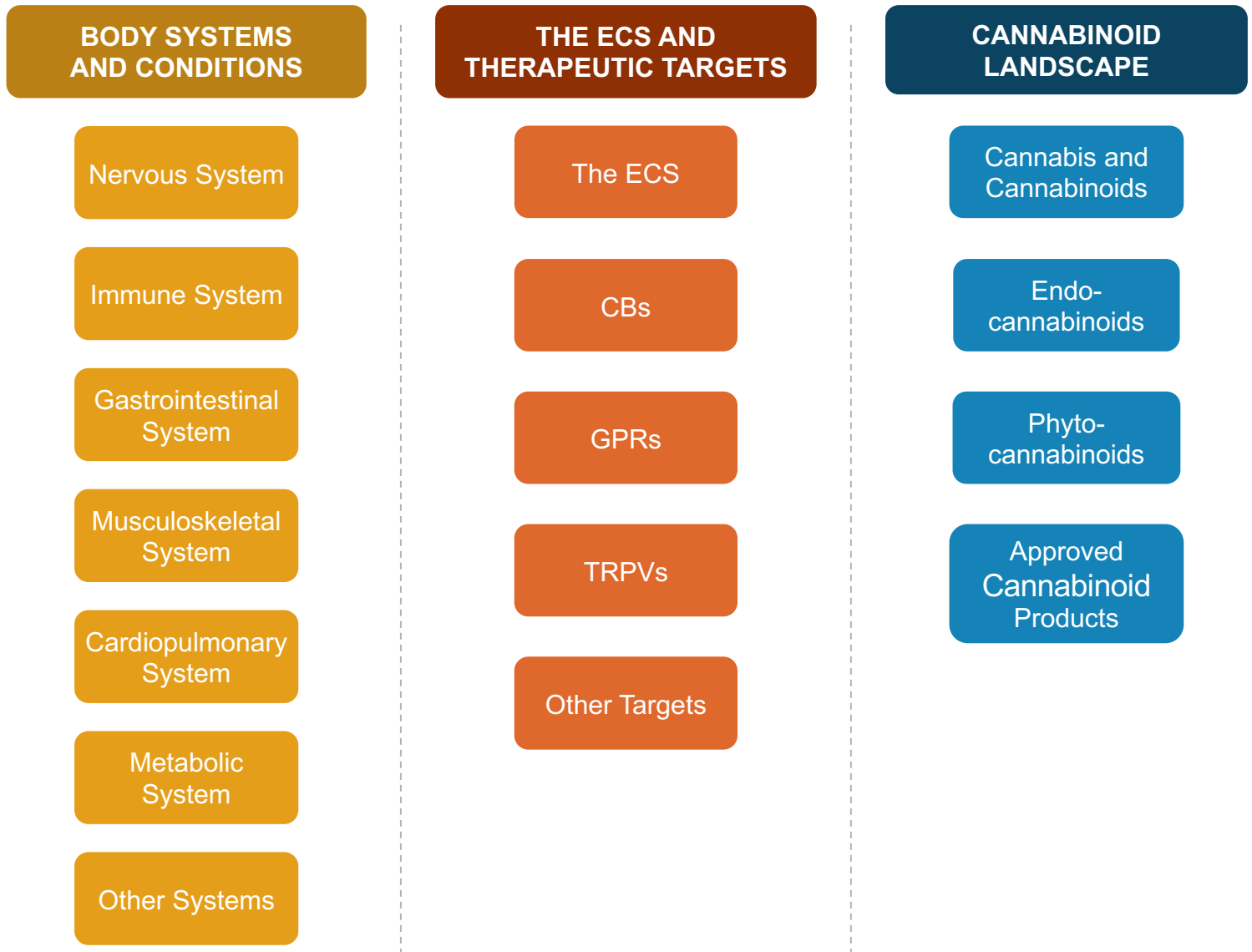
- Explain the components and functions of the ECS and the body systems they most impact
- Identify key receptors that are potential therapeutic targets in the ECS
- Familiarize participants with endocannabinoids, phytocannabinoids, and cannabinoid products
- Connect diseases and conditions to the cannabinoid products that are approved to treat them
- Describe the therapeutic potential of the ECS and conditions that may be treated with cannabinoids

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Course Level 100 *(continued)*

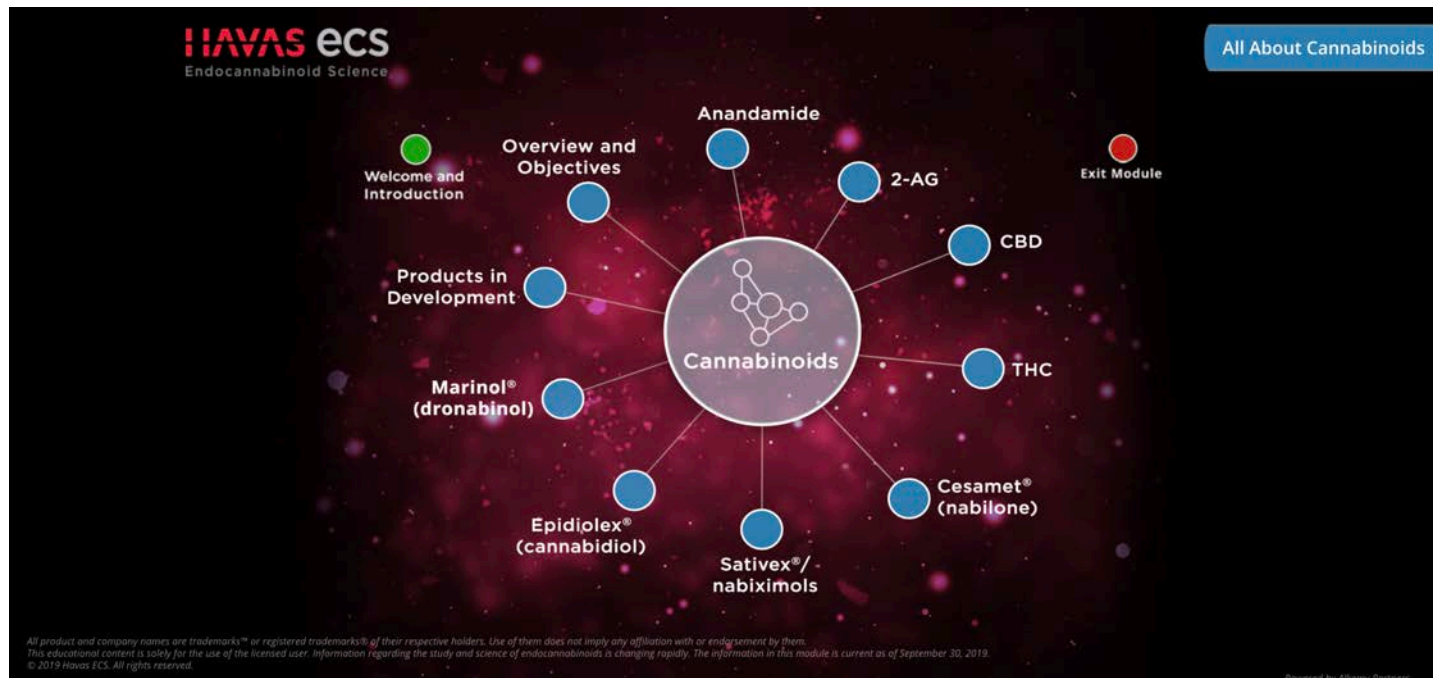
Topics covered in this module include:



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Course Level 200: Deeper Understanding All About Cannabinoids



This module provides a deeper dive into key endocannabinoids, phytocannabinoids, and cannabinoid products, including those that have been approved by various regulatory agencies and others in development.

The knowledge gained from completing this module will allow participants to:

- Describe the molecular structures and synthesis/degradation pathways for endocannabinoids
- Understand the receptor targets of key endocannabinoids and the signaling pathways and body systems they affect
- Describe receptor targets, signaling pathways, and effects of key phytocannabinoids
- Discuss the indications, administration, mechanisms of action, and efficacy and safety of approved cannabinoid therapies
- Identify cannabinoid products in development

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Course Level 200 *(continued)*

Topics covered in this module include:

ALL ABOUT CANNABINOIDS

Cannabis and
Cannabinoids

2-AG

Anandamide

CBD

THC

Cesamet®
(nabilone)

Epidiolex®
(cannabidiol)

Marinol®
(dronabinol)

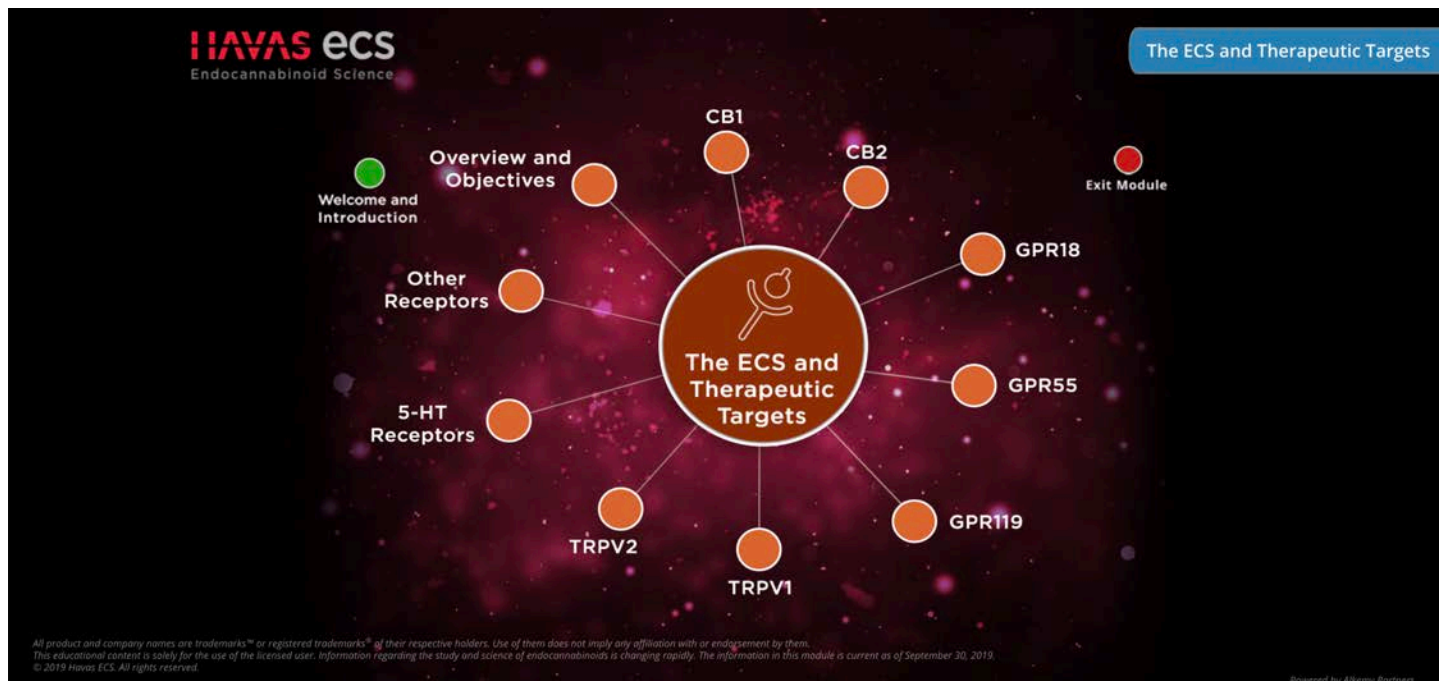
Sativex®
(nabiximols)

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Course Level 201: Deeper Understanding

The ECS and Therapeutic Targets



This module is designed to provide a deeper understanding of the ECS and its key receptors. The knowledge gained from completing the module will allow participants to:

- Identify key receptors for endocannabinoids, phytocannabinoids, and approved/developmental cannabinoid products
- Summarize the expression patterns of these receptors throughout the body
- Describe the various signaling pathways controlled by these receptors and their effects
- Describe the physiology/pathophysiologies involving the ECS
- Learn the potential therapeutic implications of targeting these receptors and other components of the ECS

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Course Level 201 *(continued)*

Topics covered in this module include:

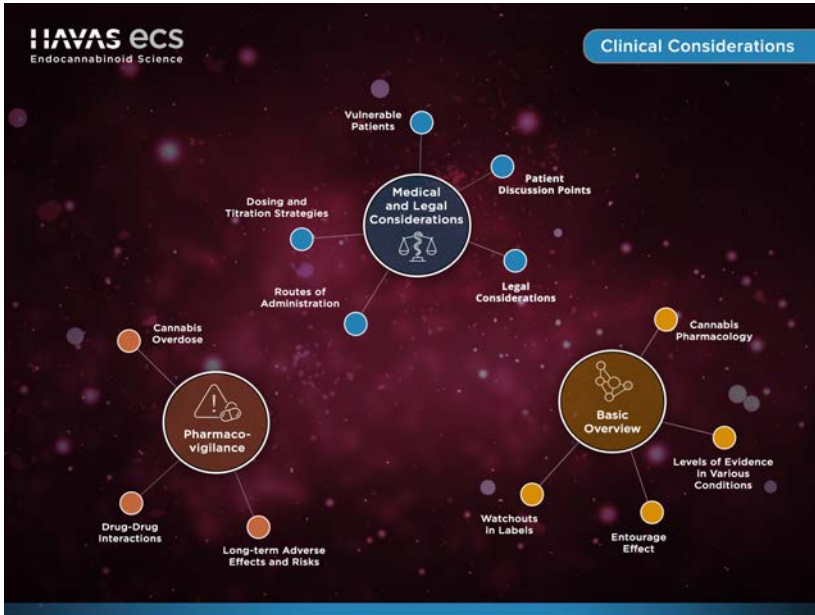


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Course Level 202: Clinical Considerations

Cannabinoids in Clinical Practice



This module is designed to provide a deeper understanding of how to best integrate cannabinoids into clinical practice. Please note that this module is not intended to dictate strict practice guidelines. It is meant to provide information that clinicians can use to help guide their cannabinoid treatment decisions.

The knowledge gained from completing this module will allow participants to:

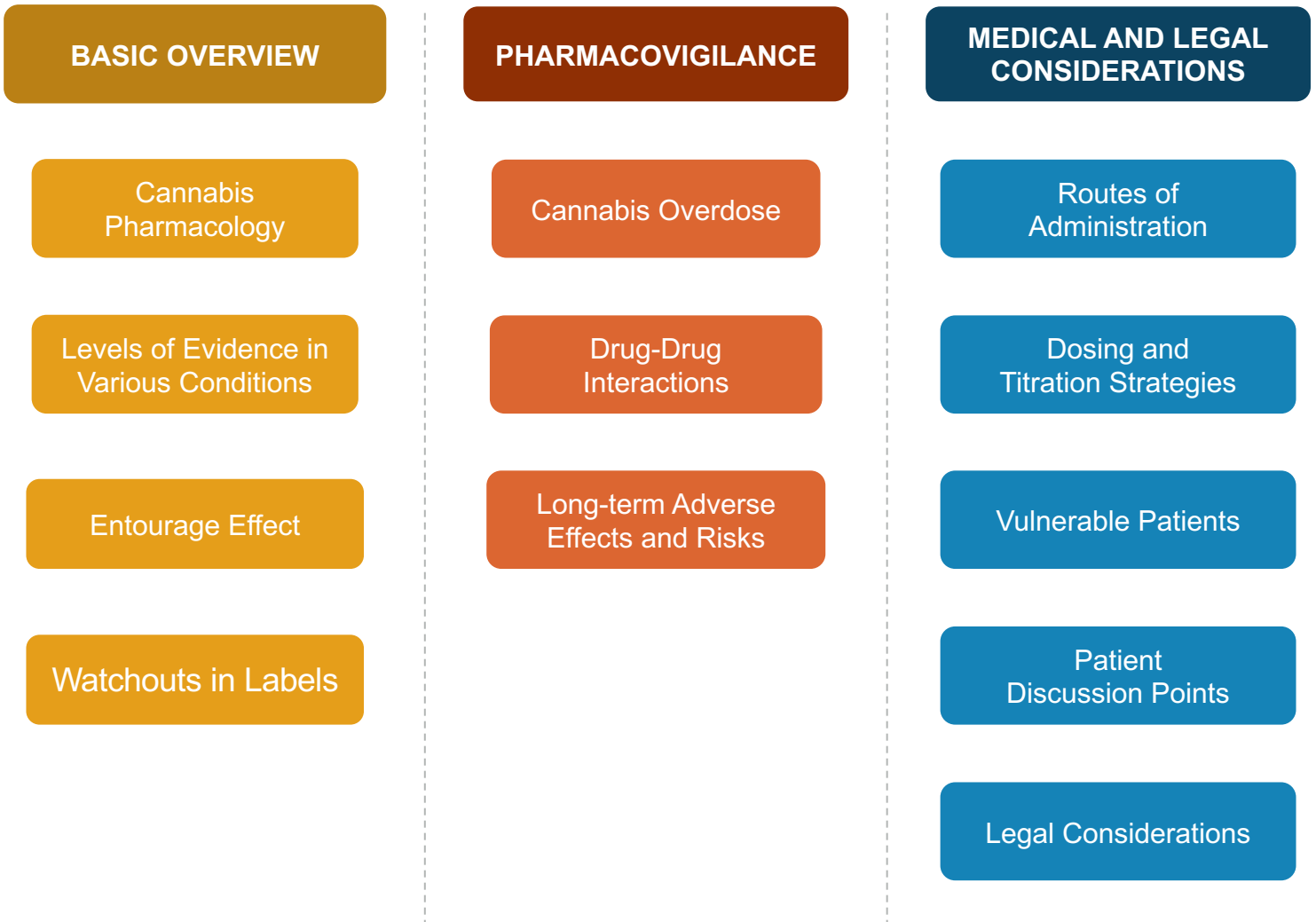
- Determine how to best integrate cannabinoids into clinical practice
- Understand the various routes of administration and their impact on cannabinoid availability and effects
- Apply practical tips on dosing and titration by condition
- Identify potential adverse reactions associated with cannabinoids
- Recognize the considerations for potential use of cannabinoids in vulnerable patients
- Understand potential drug-drug interactions
- Know the legal considerations, including federal and state regulations, as well as requirements for documentation and monitoring

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Course Level 202 *(continued)*

Topics covered in this module include:



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Experts agree on the need for Endocannabinoid Medicine Certification

“This course sets the standard for quality education materials regarding the endocannabinoid system and cannabis.”

— Dr. Perry Solomon, San Francisco, CA
previously Chief Medical Officer of HelloMD

“Our members, across medical specialties, deserve the best endocannabinoid medicine training available. This accredited endocannabinoid medicine certification program helps support our physicians as they carefully integrate prescription cannabinoids, medical cannabis, and non-prescription cannabinoids into medical practice.”

— Larry Downs, Esq
CEO, Medical Society of New Jersey

“I really like this ECS system. Our medical schools are not offering this information in such a concise platform.”

— Kennedy Ganti, MD
Family Practitioner, Willingboro, NJ

“A best-in-class resource to more knowledgeably guide medical staff, especially when adding medical cannabis to existing patient treatment regimens, to help prevent and better manage potential drug-drug interactions associated with numerous Rx and OTC medications.”

— A Global Clinical Director
Medical Cannabis Industry

“A very useful and interactive primer on the endocannabinoid system. Provides the essential background and important practical tips for clinicians seeing patients today.”

— Shanu Modi, Medical Oncologist
Memorial Sloan Kettering Cancer Center