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# Designing for online learners

Development of the online certificate in  
cannabis studies

STEPHANIE FORSCHNER-DANCAUSE



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# Mapping of the Program



## Who are our learners

- Diverse educational backgrounds
- Wide range of ages
- Working



## What should they be able to do

- Skills they will gain
  - Program learning outcomes (PLOs)
  - Course learning outcomes (CLOs)



	BPS 206 - Foundation of Cannabis Studies	BPS 312 - Cannabis Chemistry
Contact	Stephanie Forscher-Dancause	Matthew Bertin
Deadline	Summer 2020	Summer 2020
Term Launch	Fall 2020 Session 1	Spring 2021 Session 1
Course Description	The history, regulation, and ethics related to cannabis use are explored. The endocannabinoid system and cannabinoid pharmacology are introduced.	The natural products produced by cannabis and their genetic basis will be described. The entourage effect will be explored.
<b>OBJECTIVES</b>		
PLOs	Interpret available information regarding cannabis to assess credibility and validity	Assess the bioactivity of cannabis and communicate options for client care
CLOs (linked to PLOs)	1. Students will be able to summarize federal and state regulations regarding cannabis and maintain current knowledge as policies evolve. 2. Students will be able to analyze and evaluate sources of cannabis information they encounter and separate credible sources from non-credible ones. 3. Students will be able to explain the endocannabinoid system and its potential functions in human physiology. 4. Students will be able to apply important concepts of pharmacology to the actions of cannabinoids in the body.	1. Students will be able to identify the major metabolites produced by the cannabis plant. 2. Students will be able to describe the biosynthetic pathway and bioactivity of the major cannabinoids. 3. Students will summarize the extraction and separation of cannabinoids. 4. Students will be able to describe the genetic strain related variability of cannabis. 5. Students will be able to describe the entourage effect to the chemical constituents of cannabis.
APDOs (Linked to Industry Research)	Collaboration Creativity 21st Century Skills/Technology	
<b>ASSESSMENTS</b>		
Portfolio Components		
Significant Assessments (linked to PLOs) see Assessment Plan	debunk assignment - determine which source of information is credible and which is not; state regulations of your state	Policy Brief
Other Key Assignments (linked to SLOs/CLOs/ADPOs)		
Threaded Assignments	therapeutic	
<b>CONTENT</b>		
Library Resources		
Required Textbooks		
E-Resources	Cannabilab	Cannabilab
Key Technology		

**Cohesive program**

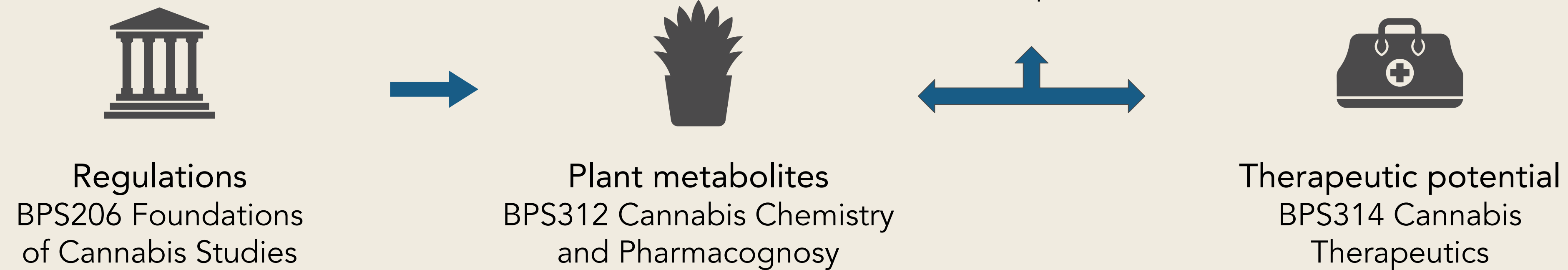
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# Authentic Assessments & Threaded Project



## Project: Development of a therapeutic cannabis product

- Spans all four courses
- Real world applications
- Demonstrates PLOs met



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# Authentic Assessments & Threaded Project



Cohesive assessment formats  
across all courses

## Scaffolding for project

- Information literacy
  - debunk the infographic
  - make an infographic of your state's regulations
- Therapeutic potential
  - draw your cannabinoids mechanism of action
  - mock client interactions/case studies

## Transparent instructions

([www.tilthighered.com](http://www.tilthighered.com))

**Purpose:** The purpose of this assignment is to locate and decipher the regulations regarding the use and sale of cannabis products in your state of residence. The assignment will address the **student learning outcome #1:** you will be able to summarize federal and state regulations regarding cannabis and maintain current knowledge as policies evolve. The product of this assignment will be used in your threaded project. By completing this assignment, you will gain **knowledge** in 1) the regulations in effect in the state in which you intend to work in the cannabis space and 2) where to locate such regulations to stay well-informed as regulations continue to become more sophisticated. You will gain **skills** in creating credible information to distribute and citing your sources.

**Task:** You will create an infographic detailing the regulations on the use and distribution of cannabis products in your state. The goal is to inform the viewer about the regulations in place and how they make the use/sale of cannabis safer. To complete the assignment, you will:

1. Find credible sources of information detailing your state's regulations.
2. Present the information you find in an infographic to share with the class using [piktochart.com](http://piktochart.com). Sign up for a free account using your email. You can select from templates they have or create your own.
3. Properly cite the sources of your information using the APA citation format (check the [threaded assignment](#) for more information on the APA citation format).

**Criteria for success:** Note: This is not a graphic design course and you will not be graded on how slick your infographic looks! However, it must be well organized and easy to read/follow. The infographic will be evaluated based on the rubric below.

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# Learning Content

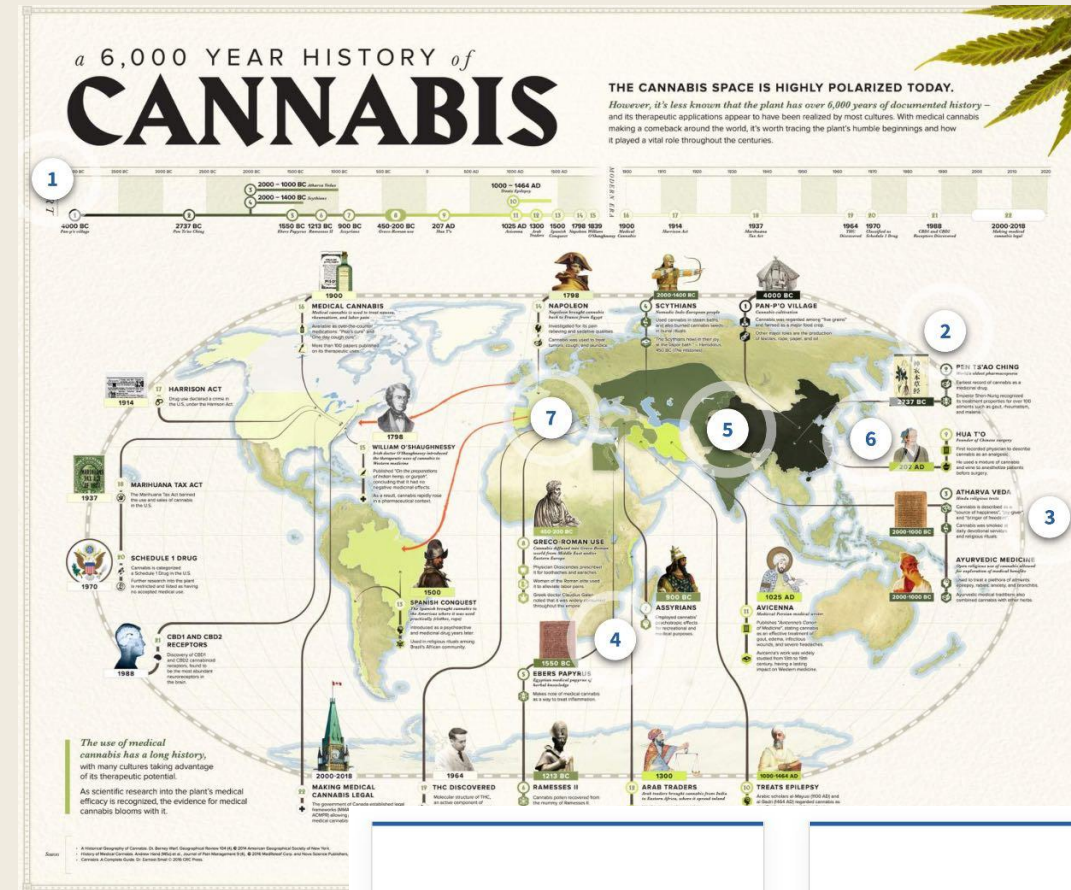
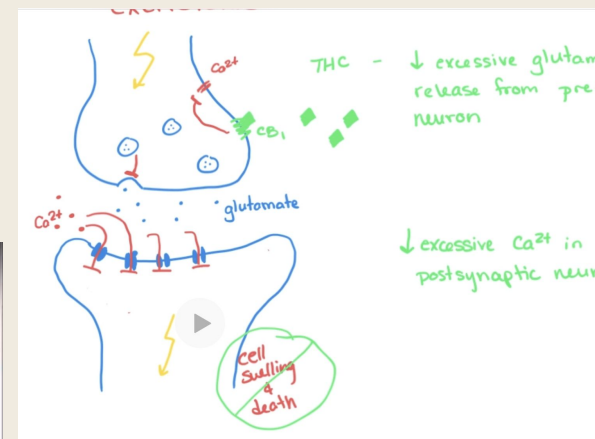


## Engage with content

- Hot spots, flip cards, sorting reviews, etc
- expert roundtables, podcasts

## Attention friendly videos

- 5-10 minutes
- Break up into multiple 'subtopic' videos
- 'animated' explanations
- Cannabilabs



Marinol (dronabinol)

Cesamet (nabilone)

Syndros (dronabinol)

Click to flip

Glutamate + endocannabinoid

Excitation

Inhibition

Match therapeutics with FDA-approved uses vs. anecdotal uses.

CBN	Seizure disorders
THC	Chemotherapy-induced nausea
CBD	Inflammation
Marinol	Euphoria
Epidiolex	Anti-bacterial

SUBMIT



## Experience

- Virtual labs - game play
- Client simulations

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# Online Design in F2F classroom

## Authentic assessments

- Real world measures of CLOs
  - mock student grant applications
- Transparent instructions
  - "I finally understand why..."

## Engage with content

- Team edited google slides

## Threaded Projects

- Interlabs - M. Bertin
  - Continuing of experiments between courses and levels
  - Authentic to industry workflow

**Thank you!**

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