4HR COURSE OUTLINE: MARIJUANA UPDATE *CONCENTRATED CANNABIS*

Goals and Objectives:

The course will cover current techniques and trends associated with the manufacturing, packaging and sales of concentrated cannabis. This course will also outline dangers associated with the manufacturing of butane honey oil, as well as the dangers associated with alcohol based solvents used in the extraction process of concentrated cannabis.

I. Registration and Orientation.
   - A. Introduction
   - B. Course Objectives

II. Hash oil, or concentrated cannabis?
   - A. What is hash oil or concentrated cannabis?
   - B. How is it made?
     1. Chemicals used in the extraction
     2. Different manufacturing techniques
   - C. Slang terms/names for hash oils

III. Why concentrated cannabis?
   - A. THC percentages
   - B. Transportation concerns
   - C. Monetary values

4HR COURSE OUTLINE: MARIJUANA UPDATE *CONCENTRATED CANNABIS*

IV. Chemical properties and purity of solvents.

A. Impurities in solvents that affect outcomes of extraction
   1. Water
   2. Fill Chemicals
   3. Additives

B. Polarity of solvents
   1. Polar solvents
   2. Non-polar solvents
   3. Semi-polar solvents

C. Solvents
   1. Water
   2. Ethyl/ethanol/grain alcohol
   3. Isopropyl alcohol
   4. Hexane
   5. Propane
   6. Butane

V. Bubble hash and Kief hash

A. Bubble hash
   1. How it's manufactured
   2. Forms
   3. Dollar amounts

B. Kief hash
   1. How it's manufactured
   2. Forms
   3. Dollar amounts

4HR COURSE OUTLINE: MARIJUANA UPDATE *CONCENTRATED CANNABIS*

VI. Applicable California law

A. California Health and Safety Code 11379.6

B. California Penal Code 452(a)

C. California Penal Code 452(b)

VII. Butane honey oil extraction

A. Butane facts

1. Boiling point
2. Flashpoint
3. Explosive limits of butane
4. Material Safety Data Sheet (MSDS)

B. Extraction amounts

C. Extraction tubes

1. Polyvinyl chloride (PVC)
2. Glass
3. Steel
4. Aluminum
5. Improvised

D. Collection dishes

1. Glass
2. Silicone

E. Extraction

1. Combining butane with marijuana
   a) Classroom demonstration

F. Butane evaporation

1. Factors that affect evaporation times
   a) Elements
   b) External heat sources

G. Further butane honey oil refinement methods

1. Grain alcohol shatter method
2. Heat and vacuum purge shatter
   a) Small scale vs. commercial grade

4HR COURSE OUTLINE: MARIJUANA UPDATE
CONCENTRATED CANNABIS

VIII. Butane recovery systems (closed loop)

A. Closed loop butane extractions

1. Components of a butane extraction and recovery system
2. Commercial butane cylinders
3. Closed loop butane recovery process

IX. Closed loop CO2 recovery system

A. Closed loop CO2 extractions

1. Components of a CO2 extraction and recovery system
2. Closed loop CO2 recovery process

X. Smoking butane honey oil

A. Water pipes

B. Vaporizer pens

1. Refills

XI. Butane honey oil lab investigations

Class discussion throughout this section re: identifying components of lab

A. Identifying components of butane honey oil labs

B. Processing butane honey oil lab scenes

1. Photographic and video evidence
2. Collection
3. Lab set up
4. Latent print search
5. Proper lab component preservation and disposal

4HR COURSE OUTLINE: MARIJUANA UPDATE *CONCENTRATED CANNABIS*

XII. Butane honey oil lab explosions

Class discussion throughout this section re: what to look for at scene

A. Ignition sources

B. Shockwaves

1. Displacement of objects
2. Significance of broken glass

C. Flash fire

D. Evidence locations and collections

1. Identifying lab components inside a lab explosion scene

XIII. Injuries caused by butane honey oil lab explosions