

Certified Addictions Counseling Program at the CPD

The University of Denver's Center for Professional Development is proud to offer the seven-course series of trainings required for Certified Addictions Counseling. Interested professionals may take the courses one at a time depending on their schedule and educational needs, or they may attend the Center's "CAC Camp," which includes all seven courses in one intensive series. [Click here](#) for more on CAC Camp.

Additionally, the CPD offers a licensure exam preparation course, available multiple times throughout the year. We also offer a Substance Abuse Consultation Series. For more information about these programs, [click here](#).

Course Title

- Certified Addictions Counseling Series: Pharmacology II
- CAC Level II Required Class
- Prerequisite: Pharmacology I

Overview of Training

Neuroscience and genetic research on addiction continues to make significant progress toward understanding the changes in the brain that underlie drug use and addictive behaviors. This research has the potential to significantly affect both the way in which we think about addiction, and those who suffer from it. Addictive drugs have habit-forming actions that can be localized to a variety of brain regions which can activate the reward circuitry in the brain. This class will explore the neurobiological basis of addiction and how addictive drugs produce neurochemical changes in the brain's reward pathway. It will also explore new technologies for treatment and prevention based on brain science. All CAC required classes seek to enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

Course Content

- a. This class will present addiction as a medical brain disease; with focus on the action of neurotransmitters, brain functions and regions affected by drug abuse, the adolescent versus adult brain, and what is being learned from brain imaging studies.
- b. Impact of drug abuse on attention, consciousness, learning, memory, critical thinking skills, executive functioning skills, problem solving, goal setting, motivation, social skills and life skills
- c. Cultural and societal factors that influence the abuse of chemicals and their impact
- d. Prevalence data and related information about the abuse of prescription medications and which of these medications are most often abused such as benzodiazepines and opiates
- e. Medication-assisted treatment used in addiction recovery, including definitions, biological implications, and overview of medications used to assist in recovery including such medications as Methadone, Buprenorphine, Antabuse, Naltrexone, Campral, Vivitrol, and Suboxone. In addition, the impact of nutrition in the recovery process will be addressed.
- f. The goals of medically-assisted treatment for addiction

- g. Benefits of addressing the use of tobacco, nicotine, and medical marijuana during treatment
- h. Importance of healing the brain in recovery and treatment options.

Demonstration of Competencies

Upon completion of this training class, as measured by skill demonstration and examination, the participant will be able to:

- a. Describe how drugs impact brain chemistry and functioning
- b. Understand the treatment implications or neurobiological damage in the body and brain
- c. Understand holistic implications of substance abuse/addiction including cultural, societal, and psychological factors
- d. Describe the biological processes of recovery from genetic, neurochemical, and cultural perspectives
- e. Name at least three medication-assisted treatment options for addiction recovery
- f. Name at least three components of nutrition to consider in recovery
- g. Understand the advantages of addressing nicotine, alcohol and medical marijuana concurrently with substance abuse/addiction treatment

Suggested References

- a. Erickson, Carlton. *The Science of Addiction: From Neurobiology to Treatment*. New York, N.Y.: W.W. Norton & Co., 2007.
- b. Hanson, G. R.; Venturelli, P. J. and Fleckenstein, A. E. (2006 or most recent edition). *Drugs and Society*. Jones and Bartlett Pub. *
- c. Inaba, D.S. Cohen, W. E. (2000 or most recent edition). *Uppers, Downers, All Arounders*. CNS Productions, Inc. *
* *PowerPoint slides are available for each text.*
- d. NIDA has PowerPoint presentations that include neuro-imaging meant to be reproduced for teaching purposes. Teaching packets 3, 4, and 5 at www.nida.com.
- e. Ray, Oakley, and Ksir, Charles. *Drugs, Society, and Human Behavior*. Boston, MA: McGraw-Hill, 2004.
- f. Videos:
 - *Animated Neuroscience: The Action of Nicotine, Cocaine and Marijuana in the Brain*. Films for the Humanities & Sciences: <http://ffh.films.com>.
 - *Constant Craving, The Science of Addiction*. Films for the Humanities & Sciences: <http://ffh.films.com>.
 - *Designer Drugs*. CNS Productions, Inc.: <http://www.cnsproductions.com>.
 - *Herbal Remedies*. Films for the Humanities & Sciences: <http://ffh.films.com>.
 - *Hallucinogens and Human Physiology*. CNS Productions, Inc.: <http://www.cnsproductions.com>.
 - *Marijuana: Neurochemistry and Physiology*. CNS Productions, Inc.: <http://www.cnsproductions.com>.
 - *PCP and Ketamine*. CNS Productions, Inc.: <http://www.cnsproductions.com>.
 - http://www.cnsproductions.com/Videos/Addiction_Education_Videos/Drug_Education_Videos_DVD/22.html*Prescription And OTC Drugs: Misuse and Abuse DVD*. CNS Productions, Inc.: <http://www.cnsproductions.com>.

- *Psychoactive Club Drugs and Inhalants*. CNS Productions, Inc.: <http://www.cnsproductions.com>.
- *Stimulants*. CNS Productions, Inc.: <http://www.cnsproductions.com>.

Instructor Bio

Thea Wessel is an addictions counselor with her own private practice in Colorado. She has been working in the criminal and addictions fields for seven years. Ms. Wessel earned her master's degree in forensic psychology from the University of Denver and has also earned her LPC, LAC and MAC. She is currently the president of the Colorado Association of Addictions Professionals (CAAP) and also teaches as an adjunct professor at the University of Denver. Ms. Wessel continually challenges herself and others to provide quality addictions treatment and to educate the community about addictions issues.