Course Code:	COUN-1156
Short Title:	The Neurobiology of Addiction
Long Title:	The Neurobiology of Addiction and Substance Use Strategies
Prerequisites:	N/A
Co-requisites:	N/A
School:	School of Health, Community and Social Justice
Division/Academy/Centre:	Centre for Counselling and Community Safety
Previous Code & Title:	N/A
Course First Offered:	April 2019

Credits:	1

Course Description

This course covers current research about substance use disorders and how science is contributing to new treatment approaches. Through videos, guest speakers, presentations and group discussions, learners will discover how the brain is affected by various classifications of substances (including opioids, sedatives, stimulants, psychedelics, and cannabinoids) from early experimental use through to dependency. Through case studies we will explore some key factors that medical practitioners and clinicians consider when treating problematic substance use. Learners will come to know how science is helping many substance disordered individuals let go of the shame, guilt and judgment associated with problematic substance use. The course is taught through a trauma informed lens, with attention to intersectionality and the implications of diversity.

This course is designed for counsellors, mental health professionals, social workers, nurses and other health care workers serving individuals or families affected by problematic substance use.

Course Goals

Learners will demonstrate knowledge of current neurobiological research in the field of substance use disorders, and its impact upon the treatment field. Learners will gain a heightened awareness of factors that put individuals at higher risk to develop substance use disorders and tools and resources of how to use them effectively.

Learning Outcomes

Upon successful completion of this course, the learner will be able to:

1. Explain how chemical dependency develops in the brain, and summarize symptoms likely to be experienced by individuals withdrawing from different categories of substances.
2. Discuss the experience of “craving” from a neurobiological perspective, and key treatment approaches that could be taken to support a person experiencing cravings.

3. Define the terms "intersectionality" and "trauma-informed" and discuss the importance of each to the understanding and treatment of substance use disorders.
4. Identify the need to develop and incorporate competency in working with subgroups of the population who are at especially high risk to develop substance use disorders.
5. Demonstrate a basic knowledge of how to apply the information and tools covered in this course to individual situations that will arise in their workplace.
6. Identify personal values, perspectives and biases that might impact their work with substance-disordered individuals and families.

Course Topics/Content

- Current neurobiological research regarding development of chemical dependency.
- How science can contribute to lessening of shame, guilt and judgment regarding addiction.
- Inter-relationships between trauma, mental health and psychosocial factors and development of substance use disorders.
- Current pharmacological and other treatment approaches for various types of chemical dependency, including Methadose, Buprenorphine, Naloxone and Suboxone.
- Discussion of "determinants of health" and factors that put certain individuals / groups at higher risk of developing substance use disorders.
- Naloxone kits: Where to get one, how to use one. Why are recreational users more at risk to die of an overdose than people in the downtown east side?
- Online and other resources for use with patients / clients.

Text & Resource Materials

All materials are provided in class.

Equivalent JIBC Courses

Instructional Method(s) *(select all that apply)*	**Hours**
☒Direct Instruction (lecture, seminar, role plays, independent study, etc.)	14
☐Supervised Practice (includes simulations & labs)	
☐Practice Education, Field Placement, Internship or Co-op	
Total	14

Course Evaluation

The evaluation criteria used for this course are represented below. Specific course evaluation information will be provided by the instructor at the start of the course. All students are required to participate in group activities and discussions. If the student is enrolled in the Substance Use Certificate Program they are required to submit a final program assignment which is based on all certificate program courses.

Criterion	% of Final Grade (may be represented as a range)
Course work (activities, assignments, essays, reports, etc.)	50%
Quizzes and exams	
Simulations/Labs	
Attendance/Participation (in class or online)	50%
Practice Education/Internships	
Total	**100%**

Comments on Evaluation

Course Grading Scheme*

☐**JIBC1 (A to F)** ☐**JIBC2 (MAS/NMA)** ☐**JIBC3(CM/IN)** ☒**JIBC4 (P/F)**

(http://www.jibc.ca/policy/3304 Grading policy)*

Other Course Guidelines, Procedures and Comments

View official versions of related JIBC academic regulations and student policies in the JIBC Calendar on the following pages of the JIBC website:

Academic Regulations:

*http://www.jibc.ca/programs-courses/jibc-calendar/**academic-regulations***
Student Academic Integrity Policy
Academic Progression Policy
Admissions Policy
Academic Appeals Policy
Evaluation Policy
Grading Policy

Student Policies:

http://www.jibc.ca/about-jibc/governance/policies

Access Policy
Harassment Policy – Students
Student Records Policy
Student Code of Conduct Policy

JIBC Core Competencies

The JIBC promotes the development of core and specialized competencies in its programs. Graduates of our programs will demonstrate high levels of competence in the following areas:

☒ **Critical thinking:** Identify and examine issues and ideas; analyze and evaluate options in a variety of fields with differing assumptions, contents and methods.

☐ **Communication, Oral and written:** Demonstrate effective communication skills by selecting the appropriate style, language and form of communication suitable for different audiences and mediums.

☒ **Problem solving:** State problems clearly; effectively and efficiently evaluate alternative solutions; choose solutions that maximize positive and minimize negative outcomes.

☒ **Interpersonal relations:** Know and manage ourselves; recognize and acknowledge the needs and emotions of others including those with diverse cultures, backgrounds and capabilities.

☐ **Leadership:** Inspire individuals and teams to reach their potential by embracing innovation through strategic thinking and shared responsibility.

☐ **Independent learning**: Show initiative by acting independently in choosing effective, efficient and appropriate applied learning, research and problem solving strategies.

☒ **Globally minded:** Self-aware of own identity and culture, recognize the interconnectedness of world events and issues; interact respectfully and authentically across cultures; value multiple perspectives; utilize curiosity to learn with and from others.

☒ **Inter-professional teamwork:** Understand and work productively within and between groups, respect others' perspectives and provide constructive feedback with special attention to inter-professional relationships.

☒ **Information literacy:** Recognize and analyze the extent and nature of an information need; efficiently locate and retrieve information; evaluate it and its sources critically, and use information effectively and ethically.