

UBC Health and BC Centre on Substance Use

# Substance Use and Addiction Environmental Scan



THE UNIVERSITY OF BRITISH COLUMBIA

**UBC Health**



BRITISH COLUMBIA  
CENTRE ON  
**SUBSTANCE USE**

Networking researchers, educators & care providers

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# 1. Executive Summary

## Background

Given the prevalence and harms of substance use and addiction, it is important for health professions across the disciplines to have a foundational level of substance-use related competencies, to identify and address substance use issues and disorders. In recognition of the importance of substance use education and training at the pre-licensure level and beyond, UBC Health has partnered with the BC Centre on Substance Use (BCCSU) to strengthen collaborative education, training and also research opportunities in substance use and addiction across disciplines.

## Purpose

The purpose of this environmental scan was to: 1) identify existing substance use and addiction content across health professional programs<sup>1</sup> on both UBC campuses, inclusive of both classroom and clinical placement experiences; and 2) help start to identify opportunities to enhance substance use and addiction education and training across disciplines.

This report includes information from health professional programs across the UBC Vancouver and Okanagan campuses. Programs were asked about both classroom curriculum and also clinical placements related to substance use and addiction. Twenty-two programs provided information regarding classroom curriculum, and 17 programs provided clinical placement information. The information in this report was provided by program directors, curriculum managers, faculty members, placement and field education coordinators, and others identified as appropriate contacts for this subject area.

In addition, an interprofessional group of students from the UBC Health Student Caucus were surveyed about their impressions of curriculum content.

## Key Findings

Classroom curriculum: Out of the 22 programs who responded, 10 programs include substance use and addiction content as part of their core curriculum. Four programs have electives on this topic but no core content, and 8 programs have no substance use or addiction content at all. The majority of programs indicated interest in exploring how to enhance substance use and addiction content within their curriculum. Many programs with core content did not have explicit learning objectives focused on substance use and addiction, and content is often taught within a mental health course. The breadth and depth of topics covered varied extensively by program. However, some common themes include: stigma, social determinants of health, harm reduction and opioids.

Clinical placements: All health programs were contacted to provide information regarding clinical placements, and 16 programs responded with information. Five programs have at least

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<sup>1</sup> While the focus of this environmental scan is on health professional programs, we recognize that there are other programs across UBC that provide important substance use and addiction related curriculum.

one mandatory mental health and substance use (MHSU) placement - 1 with a focus on both mental health and substance use, 4 with a focus only on mental health. Nine programs have optional MHSU placements and ten programs reported that their students receive unplanned learning about this topic while on placement. Two programs offer optional SU practicum placements with explicit learning objectives related to substance use and addiction.

Student survey results: The majority of students surveyed (n=29) said they are somewhat likely or extremely likely to encounter and work with people who use substances in their practice. However, the majority of students were unsure about how confident they will be after graduating to identify individuals experiencing substance use issues and connect them to appropriate care. The survey showed that students would like to learn more about substance use and addiction in their curriculum, regardless of profession.

### Opportunities and Next Steps

Through the UBC Health and BCCSU partnership, there are opportunities to leverage BCCSU's existing resources, educational platform and expertise to enhance substance use and addiction education for health care students across both campuses. For example, programs that have none, or very little substance use and addiction education, could utilize existing BCCSU online modules to fill important content-specific gaps. There are also opportunities for health programs at UBC to work collaboratively, with support from BCCSU, towards a set of substance-use related core competencies. Programs can also leverage existing BCCSU resources and programs to support students before and during clinical placements.

Using the information provided in this scan as a starting point, UBC Health will engage with interested programs to identify opportunities to enhance their existing offerings both unidisciplinarily and also collaboratively.

## 2. Background

There is a wide spectrum of substance use and substance use disorders. This ranges from abstinence or no substance use, to beneficial or non-problematic (e.g., drinking coffee to stay alert or drinking moderate amounts of alcohol in social situations), to problematic substance use (e.g., binge consumption) to substance use disorder or addiction.

Problematic substance use and addiction are key issues facing health care providers today. The national overdose crisis – which has resulted in over 1700 deaths in British Columbia in 2020 alone and is contributing to a decrease in life expectancy across the province – has revealed significant gaps in knowledge, access, and use of evidence-based treatment options. This unprecedented crisis has also highlighted the need to improve the overall system of care for people living with substance use disorder, or addiction. There is an urgent need to strengthen existing substance use research through partnerships, and improve access to interdisciplinary substance use education, including training and support among teams of care providers.

In recognition of the need to act upon this complex and pressing issue, and as a result of the 2018 President’s Roundtable on UBC’s response to the province-wide overdose crisis, UBC Health has partnered with the BC Centre on Substance Use (BCCSU) to strengthen collaborative education, training and research opportunities in substance use and addiction across disciplines.

### UBC Health

There are persistent health challenges and inequities that demand a collaborative approach, creating important foci for the work of UBC Health. Complementing efforts throughout the university and health sectors, UBC Health seeks to connect diverse expertise and resources across disciplines to help advance education, research, and policy in pressing areas such as Indigenous health, aging and chronic disease, and substance use and addiction. UBC Health has established partnerships with units and organizations to advance these and other priorities, including the BC Centre on Substance Use (BCCSU). A partnership manager is working across both organizations, and closely with UBC programs, to build strategies that will facilitate the integration of content about substance use and addictions into education and research activities across the university.

### BC Centre on Substance Use

The BCCSU is a provincially networked organization with a mandate to develop, help implement, and evaluate evidence-based approaches to substance use and addiction (see Appendix 1 for the core functions of the BCCSU). With the support of the Province of BC, BCCSU aims to transform substance use policies and care by translating research into education and care guidance, thereby serving all British Columbians. BCCSU is a UBC Faculty of Medicine Research Centre and Grant Institution and has over 200 staff, including 16 with academic appointments at UBC in the Department of Medicine (Division of AIDS), Department of

Sociology, School of Population and Public Health, School of Nursing, and Faculty of Pharmaceutical Sciences. Additionally, the BCCSU is host to a large number of trainees each year, including interdisciplinary addiction medicine fellows, co-op UBC Science student placements, UBC FLEX students, MSc, MA and PhD students as well as post-doctoral fellows. Through the clinical electives it supports, the BCCSU hosts training platforms for over 300 interdisciplinary trainees annually.

### 3. Environmental Scan Overview

Given the prevalence of substance use disorders, it is important that all health care providers have a foundational level of competency in the area of substance use and addiction care.

The purpose of this environmental scan was to: 1) identify existing substance use and addiction content across programs on both UBC campuses, inclusive of both classroom and clinical placement experiences; and 2) help start to identify opportunities to enhance substance use and addiction education and training across disciplines.

This environmental scan expands upon the 2018 survey conducted by UBC Health on opioid related curriculum and naloxone training (see Appendix 2). Through this latest environmental scan, programs were asked about a broad range of curriculum content related to substance use and addiction, such as: substance use disorder, opioids, alcohol, tobacco, stimulants, cannabis, overdose, harm reduction (e.g. naloxone, safe consumption sites, overdose preventions sites, drug checking), recovery, stigma, addiction care and addiction treatment.

Programs were also asked to complete a survey on clinical placements, which asked about mandatory, optional, and other placements where students would gain exposure to substance use services or clients with substance use issues.

A student survey was also distributed to the members of the UBC Health Student Caucus to explore their opinions about current substance use and addiction education. The following sections include information about both classroom curriculum and clinical placements, and findings from the student survey.

The information shared in this document is not comprehensive of all the substance use and addiction content or clinical placement opportunities in individual programs. However, it provides a good overview of what students are learning, and serves as a starting point for collaborative conversations around opportunities to enhance substance use and addiction education and training.

#### Health programs included in the scan:

In total, 23 health programs were contacted for the environmental scan for classroom curriculum and 22 health programs provided information: 16 programs from the UBC Vancouver campus, and 6 programs from the Okanagan campus. Placement information was collected from 9 programs via the survey (1 from UBC Okanagan), with an additional 3 programs providing information separately via email (2 from UBC Okanagan, 1 from Vancouver).

The information in this report was provided by program directors, curriculum managers, faculty members, placement and field education coordinators, and others identified as appropriate contacts for this subject area.

**Table 1. Health Programs and Schools who provided classroom curriculum information**

<b>Vancouver Campus</b>	<b>Okanagan Campus</b>
1. Audiology and Speech Language Pathology	1. Clinical Psychology
2. Clinical Psychology	2. Human Kinetics
3. Dental Hygiene	3. Medicine
4. Dentistry	4. Medical Physics
5. Dietetics	5. Nursing
6. Genetic Counselling	6. Master of Social Work
7. Kinesiology	
8. Medicine	
9. Nursing	
10. Nurse Practitioner	
11. Occupational Therapy	
12. Pharmacy	
13. Physical Therapy	
14. School of Population and Public Health	
15. Bachelor of Social Work (BSW)	
16. Master of Social Work (MSW)	

\*An outstanding request for information was solicited from Midwifery

## 4. Findings

This section presents the substance use and addiction environmental scan findings in three parts: Classroom Curriculum, Clinical Placements and the Student Survey Results.

### 4.1 Classroom Curriculum

Detailed information about classroom curriculum by program is listed in Appendix 3.

The below table provides an at-a-glance snapshot of programs that do or do not have substance use and addiction content in their curriculum. Out of the 22 programs who participated, 10 programs (7 in Vancouver and 3 in the Okanagan) include substance use and addiction content in their core curriculum.

<b>Vancouver Campus</b>			
<b>Program Name</b>	<b>Core Content</b>	<b>Elective Content</b>	<b>Notes</b>
Audiology & Speech Language Pathology	No	No	
Clinical Psychology	No	No	Adding an addictions graduate course Fall 2021
Dental Hygiene	Yes	No	
Dentistry	Yes	No	
Dietetics	No	No	
Genetic counselling	No	No	
Kinesiology	No	Yes	
Medicine	Yes	Yes	
Nursing	Yes	Yes	
Nurse Practitioner	Yes	No	
Occupational Therapy	Yes	No	
Pharmaceutical sciences	Yes	Yes	
Physical Therapy	No	No	
Population and Public Health	No	Yes	
Social Work (BSW)	No	Yes	
Social Work (MSW)	No	Yes	

Okanagan Campus			
Program Name	Core Content	Elective Content	Notes
Clinical Psychology	No	No	
Human Kinetics	Yes	No	
Medicine	Yes	Yes	
Medical Physics	No	No	
Nursing	Yes	Yes	
Master of Social Work (MSW)	No	No	The School of Social Work is hiring a CIHR Tier 2 CRC in Substance Misuse Research who will teach a course on substance use.

Few programs with core substance use and addiction content in their core curriculum have explicit learning objectives related to the subject area. Often, substance use and addiction are taught as part of a program’s mental health course with no mention of the topic in the course description or learning objectives.

**Programs with core substance use and addiction content**

The following table is a high level overview of substance use and addiction topic areas covered in the various programs within their core curriculum. The depth of education provided across the topics varies among programs.

Program Name	Broad topic areas covered
Dental Hygiene	Stigma Social determinants of health Tobacco use disorder Cannabinoids Women and substance use Harm reduction Trauma informed practice
Dentistry	Stigma Social determinants of health Harm reduction
Medicine	Stigma Neurobiology of SUD, DSM5 criteria, pathophysiology Tobacco use disorder / Smoking cessation Alcohol use disorder Opioids & pain SU and Pregnancy Behavioural addictions Medicinal use of cannabis

	<p>Overview of the overdose crisis</p> <p>Harm reduction</p> <p>Trauma informed care</p>
Nursing (Okanagan)	<p>Alcohol withdrawal assessment scoring</p> <p>Interconnectedness of mental health and substance use</p> <p>Intro to pharmacological management across continuum of care for substance use and addiction</p> <p>Pain management for substance use and addiction</p> <p>Introduction to safer prescribing practices</p> <p>Harm reduction</p> <p>Trauma informed practice</p>
Nursing (Vancouver)	<p>Harm reduction &amp; overdose prevention</p> <p>BCCSU ACTOC Nursing certificate:</p> <ul style="list-style-type: none"> <li>• Overview of SUD</li> <li>• Screening &amp; Care Planning</li> <li>• Specialized Assessment</li> <li>• Safer Drug Consumption &amp; Overdose Prevention</li> <li>• Legal, Policy &amp; Ethical Considerations</li> <li>• Harm Reduction</li> <li>• Trauma &amp; Violence Informed Care</li> </ul>
Occupational Therapy	<p>Functional impact of substance use</p> <p>Trauma informed practice</p> <p>Neurobiology of addiction and the stress-dopamine relationship</p>
Pharmaceutical Sciences	<p>Stigma</p> <p>Tobacco use disorder and smoking cessation</p> <p>Therapeutics of opioids</p> <p>DSM-5 symptoms of substance use disorder (SUD)</p> <p>Medications for AUD, OUD, stimulant use disorder</p> <p>Harm reduction for cannabis, OUD</p>

## 4.2 Clinical Placements

All health professional programs were contacted regarding clinical placements. A total of 16 programs responded, some via email and others through an online survey. The online survey was distributed to members of the UBC Health Practice Education Network to better understand students' exposure to substance use services or clientele with substance use and addiction issues through clinical placements. The survey asked about required mental health and substance use (MHSU) placements, optional MHSU placements, and other placements where there would be unplanned learning in this area however we recognize these questions may not capture all the relevant clinical placements.

Nine programs completed the clinical placement survey, and 7 programs provided information via email.

1. Audiology and Speech Language Pathology (email)
2. Clinical Psychology, UBCO (email)
3. Dental hygiene
4. Dietetics
5. Genetic Counselling (email)
6. Kinesiology (email – program has no clinical placements)
7. Medicine
8. Midwifery
9. Nurse Practitioner
10. Nursing (email)
11. Nursing, UBCO
12. Occupational Therapy
13. Physical Therapy
14. Master of Social Work
15. Master of Social Work, UBCO (email)
16. School of Population and Public Health (email)

### Mandatory MHSU placements

Five programs reported having a *mandatory* MHSU placement. Only one program (Dental Hygiene) reported the focus of the placement to be both mental health and substance use, while the rest were focused on mental health. None of the placements had specific learning objectives related to substance use and addictions.

Program	Mandatory MHSU placement	Focus of the placement
1. Dental Hygiene	DHYG 310-3 and DHYG 410-3	MH & SU
2. Nursing (UBCO)	NRSG 229 & NRSG 239	MH
3. Nursing (UBCV)	NURS 363: Nursing Practice with People Living with Mental Health Challenges and Their Families	MH
4. Nurse Practitioner	N570, N571, N578, N572	MH
5. Occupational Therapy	Students must do 1/5 of their placements in a MHSU setting so in any of the following 3 courses OSOT 528; OSOT 538; OSOT 558	MH

### Optional, explicit MHSU placements

Nine programs reported having *optional*, explicit MHSU placements as noted in the table below. Substance use was listed as the focus of at least 6 of the placements. While the focus of the Physical Therapy placements is community health, it was noted that the students may choose a learning objective associated with mental health and substance use.

Program	Placement	Focus of the placement
1. Clinical Psychology (UBCO):	Problematic Substance Use Practicum	SU
2. Medicine	Clerkship	MH & SU
3. Nursing (UBCO)	NRSG 437 (Mental health practice elective)	MH & SU
4. Nurse Practitioner	same as before (N570, N571, N578, N572)	MH & SU
5. Occupational Therapy	OSOT 538 or OSOT 558	MH & SU

6. Physical Therapy	There are three clinical placement courses in the program PTHH 534, 554, 574	Community Health
7. Master of Social Work		
8. Master of Social Work (UBCO)		
9. School of Population and Public Health	Students can opt for substance use-related practicum placements offered by organizations such as the BCCSU and the BCCDC.	SU

### Unplanned learning

Ten programs reported that their students may receive *unplanned* learning about substance use and addictions while on placement. Many of the courses listed were the same as those noted in previous questions about mandatory or optional MHSU courses.

Program	Yes	Maybe	Course
1. Audiology and Speech Language Pathology		✓	
2. Dental Hygiene	✓		DHYG 310-3 DHYG 410-3
3. Dietetics	✓		FNH 481, 482, 483
4. Genetic Counselling		✓	Some prenatal clinics
5. Medicine	✓		MEDD431 clerkship
6. Midwifery	✓		Each clinical placement includes outpatient antenatal and postpartum care. The percent of pregnant women with additions matches the general population and students have exposure while working with individual clients.
7. Nursing (UBCO)	✓		Could occur in any med/surg acute care course, definitely in NRSB 239,

			NRSG 437 (optional course), potentially in maternity/pediatrics practice course
8. Nurse Practitioner		✓	N570
9. Occupational Therapy	✓		OSOT 528; OSOT 538; OSOT 558
10. Physical Therapy	✓		Same as previous (PHTH 534, 554, 5740)

### Placement Sites

Programs provided examples of placements where students may get exposure to substance use and addiction. These placements are listed in Appendix 4.

### 4.3 Student Survey Results

Members of the UBC Health Student Caucus were surveyed to share their perspectives about their program's substance use and addiction curriculum. We received 29 student responses; 25 from UBC Vancouver and 4 from UBC Okanagan. There was representation from all the health professional programs except dietetics and NP. About half (n=16) are expected to graduate in 2021.

The majority of students said they are somewhat likely (n=11) or extremely likely (n=11) to encounter and work with people who use substances in their practice. In contrast, the majority of students were unsure about how confident they will be after graduating to identify individuals experiencing substance use issues and connect them to appropriate care. Some reasons provided include: limited or no training in substance use, and exposure may be dependent on practicum placements or electives.

*"I have some training on the subject, but it is not extensive."*

*"Some early teaching on substance use, but unless we seek out electives, may not have enough exposure to working with this population."*

*"Depending on practicum placement, this exposure may be limited."*

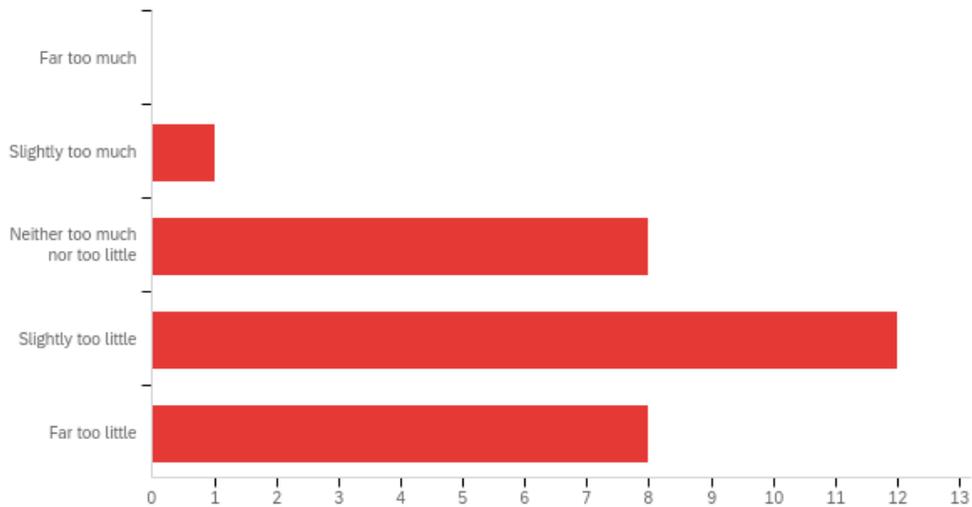
*"Unfortunately, substance use and addictions are not highlighted in our program."*

Students reported learning about the following topics:

- stigma related to substance use (n=20)
- concurrent disorders (i.e. mental health and substance use disorders) (n=19)
- social determinants of health and their interaction with substance use (n=18)
- opioids (n=16)
- alcohol (n=15)
- screening and/or assessment for substance use and addiction (n=13)
- harm reduction (n=13)
- cannabis (n=13)
- the opioid crisis (n=12)
- prevention of substance use and/or addiction (n=8)
- recovery (n=7)

Finally, the survey showed that the majority of students are interested in learning more about substance use and addiction (see Figure 1). Student comments also revealed that they recognize the importance of learning about substance use care, regardless of profession.

**Figure 1.** Q10 - How do you feel about the amount of substance use and addiction content provided in your program?



*“Since my profession (among others) isn't directly involved in the treatment or management of substance use, it would be nice to learn how we might need to adapt our practice to best support these individuals, as we help them with other health issues.”*

*“In the profession of physiotherapy, I believe there can be encounters with individuals who have addictions and/or substance use issues, as it can often arise from suffering from chronic pain. I believe we would benefit from learning how to recognize substance abuse and addictions, as well as some knowledge on who we can refer these patients to.”*

## 5. Opportunities and Next Steps

Through the UBC Health and BCCSU partnership, there is great opportunity to leverage BCCSU's existing resources, educational platform and expertise to enhance substance use and addiction education for health care students.

Programs that have none, or very little substance use and addiction focused education, could utilize existing BCCSU online modules to fill core content-specific gaps. These modules are part of the BCCSU Addiction Care and Treatment Online Certificate (ACTOC) and are targeted at all healthcare professionals (see Appendix 4).

These modules could also be utilized to ensure all students receive the same foundational substance use education, which could then be built upon by programs based on discipline-specific knowledge required. For example, this scan has found the below themes to be commonly covered across the health professional programs:

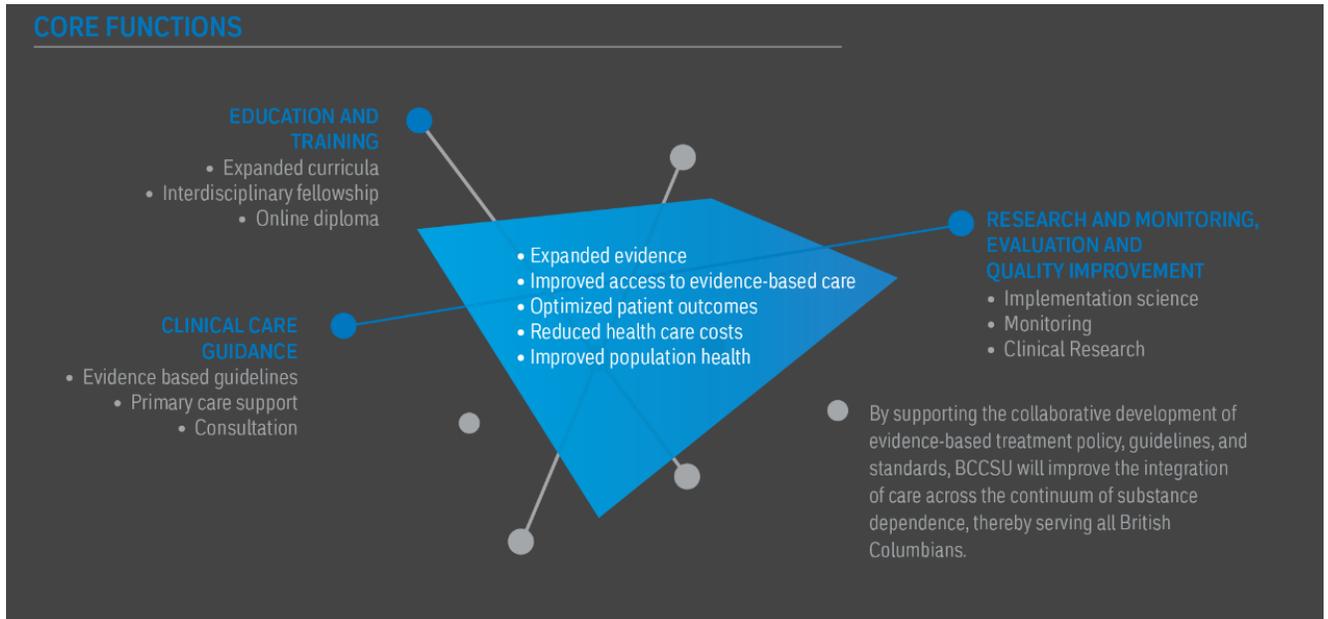
- Stigma related to substance use
- Harm reduction
- Social determinants of health and their interaction with substance use
- Opioids

Health programs at UBC can work collaboratively, with support from BCCSU, towards a set of substance-use related core competencies. Programs could also leverage existing BCCSU resources and programs to support students before and during clinical placements.

### Next Steps

Using the information provided in this scan as a starting point, UBC Health will engage with interested programs to identify opportunities to enhance their existing offerings both unidisciplinarily and also collaboratively.

## Appendix 1: Core Functions of BCCSU



## Appendix 2: UBC Health Survey of opioid related curriculum and Naloxone training – November 2018

Program	In what ways does your program or curriculum address the opioid crisis in BC (if at all)?	Do your students participate in Naloxone training? How often? When? Where?	Comments
Audiology and Speech Sciences	No	No	
School of SOWK	Yes	Yes	Social Work has an addictions course at both the BSW and MSW levels. Both courses include naloxone training as part of the course. Discussion of the opioid crisis would be part of both courses as well. One of the instructors is a nurse as well as social worker, and he provides the training, which takes place here on campus as a regular part of the course.
School of Nursing UBCO	Yes	Optional – not part of the curriculum	Year 1: Professional Growth class where NNPBC representative provided an overview of the opioid crisis in detail. Further, during a panel discussion of RNs, one street nurse discussed the topic during her presentation. Following the NNPBC some students chose to do Naloxone Training, but this was on a voluntary basis, outside of class time. Year 2: During the mental health course, one topic is addictions, and the opioid crisis is used as an example. In the community course, there is a guest lecturer for Harm Reduction who briefly discusses the opioid crisis. For the acute care content, they do not cover the opioid crisis but do learn that naloxone is the reversal agent for opioids (no training though).
School of Nursing UBC	Yes	Yes	This is core curriculum content incorporated into theory, clinical and lab courses related to mental health and primary health care specifically and as part of clinical orientation where applicable  Students complete online modules in PHSA Learning hub (Protocols related to the health authority or placement they are in) and hands-on practice in the SoN Clinical Simulation Lab

Dept. Occupation Science and OT	Yes	Yes, for some students	Yes, covered in intense detail in our mental health curriculum- pathology of opioid use; and then OT assessment and intervention. OT's are regulated to administer naloxone so if students are on placement where they may encounter issues they get training.
Midwifery	No	No	
MDUP	Yes	Yes – various opportunities	<p><b>MEDD 412</b> Week 30 –</p> <ol style="list-style-type: none"> <li>1. Explain how opioids bind to receptors in the brain, which causes breathing to be slowed or stopped</li> <li>2. List the signs of opioid overdose</li> <li>3. Describe how Naloxone has a greater affinity for the receptors to push the opioids off receptor and temporarily restore breathing</li> <li>4. Outline national guidelines for the treatment of opioid use disorders</li> </ol> <p><b>MEDD 412</b> Week 31 –</p> <ol style="list-style-type: none"> <li>14. Describe harm reduction strategies, specifically the THN (Take Home Naloxone) program available for PWUD (people who use drugs)</li> <li>15. List first-line treatment options for opioid use disorder</li> </ol> <p><b>MEDD 431</b></p> <ol style="list-style-type: none"> <li>1. Describe the symptoms of toxicity or overdose and management of toxicity for the following: a. Alcohol b. Lithium c. Tricyclic antidepressants d. Opioids, e.g., fentanyl</li> <li>2. Describe the underlying pathophysiology, clinical presentation, investigations and management of: a. Serotonin syndrome b. Hypertensive crisis c. Neuroleptic malignant syndrome (NMS)</li> <li>3. Interpret laboratory findings and drug screens in the context of the medical workup of a psychiatric patient</li> <li>4. Discuss potential sources of personal bias and strategies to mitigate them when treating special populations and patients with addictions</li> <li>5. Recognize the co-morbidity between psychiatric conditions and substance use disorders</li> <li>6. Recognize which substances can present with psychiatric symptoms during intoxication or withdrawal</li> <li>7. Recognize and differentiate how illicit and non-illicit substances can present during intoxication or withdrawal</li> </ol> <hr/> <ol style="list-style-type: none"> <li>7. Demonstrate effective initial management of a patient presenting with confirmed or suspected poisoning due to a. Acetaminophen b. Anticholinergic agents c. Carbon monoxide d. Cholinergic agents e. Digoxin f. Ethanol g. Iron h. Hallucinogens i. Opiates j. Salicylates k. Sedative-hypnotics l. Toxic alcohols m. Tricyclic antidepressants n. Oral hypoglycemics</li> </ol> <p><b>MEDD 448</b></p>

			<ol style="list-style-type: none"> <li>1. List and interpret critical clinical findings, including those derived from: a history and/or a collateral history relevant to the presenting problem and pertinent to previous, possible addictive behavior (including relevant screening tools); a physical examination aimed at determining the duration and severity of any problems with substance use disorder or addiction and potential withdrawal and co-morbidities, if necessary</li> <li>2. List and interpret critical investigations, including laboratory or diagnostic imaging studies (e.g., drug screening, liver function studies)</li> <li>3. Construct an effective initial management plan, including acting on opportunities for brief intervention with regards to behavioural modification and appropriate pharmacological intervention (e.g., nicotine replacement therapy); determining whether the patient or family members require specialized services such as addiction treatment. The patient may also need individual, family, community, psychological or other medical services</li> <li>4. Implement or refer to appropriate harm reduction strategies which can facilitate connection with services (e.g., harm reduction supply distribution to reduce risk of blood borne infections, Take Home Naloxone and drug checking to reduce overdose risks) or programs (e.g., supervised consumptions sites) or support societal efforts to reduce harm associated with drug use (e.g., decriminalization, legalization)</li> <li>5. Describe current trends in substance use and overdose and how they might apply to patients involved in substance use or addiction</li> </ol>
Dietetics	No	No	
Genetic Counseling	No	No	
Dept. of PT	No	Yes	Students are exposed to the college position statement regarding PTs may be required to inject naloxone in certain clinical settings. Our students are shown a kit during an IPE with Dentistry and Pharmacy; they are educated on how to use it, and how to gain access to it on campus.
Pharmaceutical Sciences	Yes	Yes	Year 2 – Term 1 Opioid Use and Naloxone training Year 3 – Psych Module – therapeutics of opioids
Faculty of Dentistry DMD	Yes	Yes	DENT 310 Special Care with the 1st year DMD students in January called Addiction Medicine. Jane Buxton comes and speaks about the opioid crisis and the Toward the Heart program for Naloxone use.
Faculty of Dentistry DHYG	Yes	Yes	DHYG 325 CNS Drugs – opioid and non-opioid analgesics DHYG 41d0- Mental health & substance use, harm reduction

UBC Health programming	Yes – CHIU students	No	CHIU students - <a href="https://ubccpd.ca/course/provincial-opioid-addiction-treatment-support-program">https://ubccpd.ca/course/provincial-opioid-addiction-treatment-support-program</a> Orientation to OAT (2 hr) – Dr. Neasa Coll (September)
SPPH	Yes – some grad students who are completing research  Medical students	Yes – some grad students but not generally covered in the MPH program  The simplest training is through the 5-minute app which we use for clients <a href="http://www.naloxonettraining.com/">http://www.naloxonettraining.com/</a> , Or a slightly more detailed quick learn course which takes 15-20 minutes <a href="https://towardtheheart.com/naloxone-course">https://towardtheheart.com/naloxone-course</a>	Student Research – Injectable medical grade heroin and hydromorphone vs. methadone Prescription opioid-related deaths in Canada Prescription opioid misuse among people who use illicit drugs Counselling and opioid substitution therapy and Hep C reinfection reduction Opioid overdoses linked to higher prescription rates in BC  Medical students J Buxton: We have done naloxone training at various opportunities but usually outside the curriculum, i.e. optional for those interested such as the public health interest group etc. There have been other evening sessions where we have presented different aspects of the OD crisis across the years In the curriculum I do a session on stigma re mental health/addictions and when I give the qualitative lecture in year 1 when I bring in drug use examples usually including the overdose crisis and it gets mentioned in infectious disease session by Dr. Reka Gustafson and there is pain session which Dr. Lysyshyn talks about opioid prescribing and risk of SUD.

## Appendix 3: Classroom content by program

### Vancouver Campus

#### 1. Dental Hygiene

The following are core courses in the four-year Dental Hygiene Degree Program that include various aspects of substance use and addiction.

##### DHYG 310: Dental Hygiene Theory & Practice III (term 1)

*Population Health/Tobacco use:* Students complete the Ontario Tobacco Research Unit (OTRU) Tobacco Prevention Module, work through a tobacco care case and address interprofessional approaches to tobacco use.

##### DHYG 310: Dental Hygiene Theory & Practice III (term 2):

Students attend the '*Community workshop: substance use and health care*' session with Doctor of Dental Medicine students where speakers from the Megaphone Speakers Bureau are invited to talk about substance use, stigma/discrimination and share a story of one of its members. This session focuses on the patient perspective.

Learning objectives:

- Have an open dialogue about substance use in the community
- Understand how to position the self when listening to a community member's story of substance use
- Explore ways to enable a safe space for community members/patients to share their struggles

##### DHYG 410: Dental Hygiene Theory & Practice IV (term 1)

*Mental Illness, Substance Use and Harm Reduction:*

Learning outcomes:

- Identify and analyze persona knowledge, beliefs and biases with regard to mental illness and substance use
- Describe oral presentation and management strategies for individuals living with mental disorders
- Describe signs, symptoms and treatment of mental disorders
- Analyze current harm reduction strategies
- Describe the relationship between mental health and substance use

*Women's Health Issues:* Students complete the Atira Women's Health Module (which includes a section on substance use) and in class discussion of pertinent points.

Related learning objective:

- Analyze a woman's use of substances as a means of coping

##### DHYG 410: Dental Hygiene Theory & Practice IV (term 2)

*Addressing Tobacco Use Disorder: Knowledge to Practice:* This 3 hr session includes a guest speaker from VCH and addresses the following learning outcomes:

- Discuss consideration in treating tobacco dependence in special populations (youth, parents and children, women and mental health populations)
- Practice conversation starters and ways to engage patients to address tobacco dependence.

This term also includes the following three sessions that address the cycle of disadvantage and how substance use and mental illness may be related:

1. People with a History of Incarceration
2. Poverty and Homelessness
3. Persons Living with HIV

Other sessions included in the curriculum:

#### Tobacco, Nicotine and Cannabinoids

- Discuss how and why tobacco is used
- Discuss some of the oral implications of some forms of tobacco use (according to current literature)
- Describe how tobacco use, nicotine addiction, genetics, and behavior impact the complex process of cessation
- Discuss types of cannabis, synthetic cannabinoids and cannabinoid products
- Discuss how cannabinoids are used in society today
- Discuss some of the oral implications of some forms of cannabis use (according to current literature)
- Identify appropriate assessments, educational materials, referral and counseling strategies for clients who report use of cannabinoids and tobacco

#### Motivating and Supporting Clients for Improved Self-Care

- Discuss the concept of harm reduction and trauma informed practice (TIP)
- Discuss approaches designed to help smokers quit, including both non-pharmacological and pharmacological methods (i.e., MI, staged approaches. CBT)
- Practice the 5As brief intervention using TIP
- Identify follow up supports and resources for health care providers

#### Motivating and Supporting Clients for Improved Self-Care 2

- Perform assessments to identify behaviour health risks (e.g., AUDIT, CUDIT)
- Determine the appropriate intervention and/or referral for a particular client (simulation) Deliver behavioural health counseling informed by MI, the Brief Intervention and TTM Processes of Change

## **2. Dentistry**

The following are core modules in the four-year Doctor of Dental Medicine degree program that address substance use and addiction:

DMD Year 1, DENT 410 Principles of Ethical Practice I (PEP I) 'Community workshop: substance use and health care' includes members from the Megaphone Speakers Bureau to talk about substance use, stigma, discrimination and share a story of one of its members. This session focuses on the patient perspective.

Learning objectives:

- Have an open dialogue about substance use in the community
- Understand how to position the self when listening to a community member's story of substance use
- Explore ways to enable a safe space for community members/patients to share their struggles

PEP I module 'Mental Health and Practitioner Health'. *This session is not specific to substance use and addiction, but related discussions do surface.*

Learning objectives:

- Understand the potential stressors faced by the health care provider
- Discuss the detrimental impacts of certain stressors on mental health and wellbeing

PEP I module 'Social Responsibility and Justice' *This session is not specific to substance use and addiction, but related discussions do surface.* A member of the PHS is invited to share their stories.

Learning objectives:

- Define the concept of social responsibility and social justice
- Understand the concepts of social responsibility and social justice within the social determinants of health

### **3. Kinesiology**

The four-year undergraduate Kinesiology program has no core content on substance use and addiction. There is one elective course that touches upon this subject area:

#### KIN 489 (now KIN 453): Understanding and Changing Physical Activity Behaviour

The course description does not mention substance use or addiction; however, KIN 489 includes a group project where students are asked to "develop an evidence-based exercise intervention for individuals in residential treatment for addiction, and to develop an evaluation plan. In groups of 4-5 we will tackle this challenge. The general outline for the final assignment should be:

- Synthesis of evidence for exercise as a treatment for substance use disorder
- Rationale for the intervention (including theoretical basis and logic model); and a cool acronym.
- A description of the intervention including discussion of
  - Content – what is the intervention aiming to deliver, and how?
  - Delivery method
  - Deliverer – who will deliver the intervention?
- Methods for evaluating the key outcomes, behaviours, and mediators of behavior change

- Outline of assessment of intervention implementation.

#### **4. Medicine**

The following core sessions and accompanying objectives are included throughout MEDD 412, 421, 431, and 448 in the four-year MD Undergraduate Program.

##### Understanding Stigma

- Describe how medical students may be able to influence attitudes towards individuals with psychiatric disorders
- Define stigma, describe its impact on individuals with psychiatric disorders and people who use drugs, and describe why this impact is important as a determinant of population health
- Describe a process for reflecting on attitudes to stigma, and for acquiring the capacity to offer unconditional positive regard
- List resources available to medical students concerned about their personal mental health issues or where to find such resources

##### Decolonizing Addiction and Substance Use

- Describe the historical and socio-political context of the current North American illicit drug overdose crisis
- Explain how addictions relate to both individual factors (e.g. adverse childhood events, trauma) and to broader social determinants of health
- Define how language and policy may affect clinical judgments and patient care
- Discuss how stigma impacts health and social outcomes of patients with substance use disorders

##### Addictions

- Explain how opioids bind to receptors in the brain, which causes breathing to be slowed or stopped
- List the signs of opioid overdose
- Describe how Naloxone has greater affinity for the receptors to push the opioids off receptor and temporarily restore breathing
- Outline national guidelines for the treatment of opioid use disorders

##### Adolescent Substance Use and Risky Behaviors

- Identify the patterns of substance use in adolescence
- Demonstrate an accurate use of terminology of substance use disorders
- Describe the transformational changes occurring in the adolescent brain and how that impacts substance seeking and other risky behaviours

##### Smoking Cessation (BCCSU ACTOC online module)

- Describe how to apply a "brief", evidence-based intervention for a current tobacco smoker
- Describe how to use Nicotine replacement therapy (NRT) optimally
- Discuss the issues around Varenicline and how and when to prescribe

##### Neurobiology of Substance-Use Disorders

- Distinguish between substance-use disorders, intoxication, withdrawal, and substance-induced disorders
- List the DSM-5 criteria for diagnosis of substance-use disorders

- Explain the effects of cocaine, methamphetamine, cannabis, opioids, tobacco and alcohol on neurotransmitter systems
- Describe the role of the dopamine system in the pathophysiology of substance-use disorders

### Behavioural Addictive Disorders

- List ICD-11 behavioural addictive disorders (including gambling disorder, gaming disorder) and impulse control disorders (including compulsive sexual behaviour disorder) and identify clinical features 2. Describe diagnosis, prevalence, course and treatment of compulsive sexual behaviour disorder
- Identify psychiatric disorders that are commonly comorbid with behavioural addictive disorders

### Management of Severe Pain from Serious Illnesses

- Compare and contrast the different opioids and select the appropriate medication to suit clinical circumstances
- Use the opioid equianalgesic dosing chart to switch from one opioid to another
- Describe the WHO Pain Ladder, including recent modifications
- Explain the role for adjuvant (non-opioid) analgesics
- Describe the role for interventional pain management techniques

### Obstetrics and Gynaecology: Substance Use in Pregnancy

- Outline the potential deleterious effects on mom/pregnancy and neonate/child of smoking tobacco, drinking alcohol or using illicit drugs like cannabis, opioids, benzodiazepines and/or stimulants
- Explain viable smoking cessation strategies to use in pregnancy
- List the features of fetal alcohol spectrum disorder (FAS) and resources for support
- List the features of neonatal abstinence syndrome (NAS) and recommend treatment
- Describe the substances used by mothers that will require inpatient care for intoxication or detoxification or treatment support (such as Suboxone, Subutex or Methadone) and safety of pharmacological aids to recovery (such as Naltrexone, Gabapentin, Bupropion, Varenicycline, etc.)
- Outline the potential ethical issues of treating substance use disorders in pregnancy, including patient autonomy

### Medicinal Use of Cannabis

- Collaborate effectively within the health care system
- Identify public policies, laws and legislation related to the medicinal use of cannabis
- Evaluate evidence regarding the use of cannabis in the treatment of medical conditions
- Outline an approach to patients who inquire about medicinal use of cannabis
- Describe how to work with a patient and other providers to facilitate the patient to achieve their health-related goals related to cannabis use

### Addiction Medicine (Opioid Crisis) (case-based)

- List and interpret critical clinical findings, including those derived from: a history and/or a collateral history relevant to the presenting problem and pertinent to previous, possible addictive behavior (including relevant screening tools); a physical examination aimed at determining the duration and severity of any problems with substance use disorder or addiction and potential withdrawal and co-morbidities, if necessary

- List and interpret critical investigations, including laboratory or diagnostic imaging studies (e.g., drug screening, liver function studies)
  - Construct an effective initial management plan, including acting on opportunities for brief intervention with regards to behavioral modification and appropriate pharmacological intervention (e.g., nicotine replacement therapy); determining whether the patient or family members require specialized services such as addiction treatment. The patient may also require individual, family, community, psychological or other medical services
  - Implement or refer to appropriate harm reduction strategies which can facilitate connection with services (e.g., harm reduction supply distribution to reduce risk of bloodborne infections, Take Home Naloxone and drug checking to reduce overdose risks) or programs (e.g., supervised consumption sites) or support societal efforts to reduce harm associated with drug use (e.g., decriminalization, legalization)
5. Describe current trends in substance use and overdose and how they might apply to patients involved in substance use or addiction

Flexible and Enhanced Learning (FLEX) Undergraduate medical students have the opportunity to pursue a variety of scholarly activities during Year 1, 2 and 4. The BCCSU offers opportunities for highly motivated medical students who are interested in potentially pursuing a career in addiction medicine and/or epidemiology research.

AFMC Canadian Medical Schools Respond: Best Evidence Training for the Next Generation of Canadian Physicians on Pain Management, Opioid Stewardship and Substance Use Disorder

Starting Fall 2021, 10 new online modules developed by the Association of Faculties of Medicine of Canada (AFMC) will be included in the undergraduate medical curriculum. These modules will train future physicians to:

1. Work with patients to manage pain
2. Openly communicate the possible side effects of opioids
3. Address the care of persons living with opioid use disorder
4. Assess the patient's profile and adjust the prescription accordingly
5. Support patients to safely store and dispose of opioids.

## 5. Nurse Practitioner

Substance use and addiction content is found throughout the two-year Master of Nursing-Nurse Practitioner program. Specifically, the following topics are addressed within the following courses:

N506: Health Promotions in Practice – health promotion, harm reduction, recovery, stigma

N507: Pharmacology and Therapeutics in Primary Care – prescribing and management

N510: Advanced Health Assessment Across the Life Span – Mental health/substance use disorders/addictions

N571: Primary Care II – Mental health

N572: Primary Care III – Management of substance use disorders

## 6. Nursing

The following core courses address substance use and addiction in the 20 month Bachelor of Science in Nursing – BSN program:

NURS 301: Primary Health Care This course includes the following two guest lectures from BCCDC and VCH:

1. Theoretical perspectives in Nursing Practice: Harm Reduction and Overdose Prevention.
2. Local harm reduction Initiatives during Two Health Emergencies: VCH Overdose Emergency Response Strategies; Provincial Overdose Emergency Response; Provincial COVID-19 Emergency – How did this change the overdose work.

NURS 303: Theoretical Perspectives in Nursing: People living with Mental Health Challenges and their Families As part of NURS 303, students complete the BCCSU Substance Use and Addictions Nursing Certificate through the Addiction Care and Treatment Online Certificate (ACTOC) online program. This certificate covers the following topics:

- Overview of Substance Use Disorders
- Screening & Care Planning
- Specialized Assessments
- Safer Drug Consumption & Overdose Prevention
- Legal, Policy & Ethical Considerations
- Older Adults & Substance Use

## **7. Occupational Therapy**

Substance use and addiction content is built in at multiple points throughout the two-year Master of Occupational Therapy (MOT) program. For example:

OSOT 513 has a session dedicated to addressing substance use and its functional impacts on users (using opioid use as an example).

The Psychosocial Module (part of OSOT 525) and the Advanced Psychosocial Workshop (part of OSOT 545) includes time designated to explore strategies in supporting occupation participation for people using substances as well as roles of OT in the health care system for people using substances.

Also, there is one case that involves chronic alcohol use disorder during their case-based module.

Lastly, OT students are required to either participate in the Patient and Community Partnership for Education Health Mentors program, or the Patient and Community Voices workshop series, which now includes a workshop on stigma and substance use.

## **8. Pharmaceutical Sciences**

Smoking cessation and the therapeutics of substance use disorder are core content covered in the four-year Entry-to-Practice Doctor of Pharmacy program. There is one elective course (PHRM 450R) specific to substance use disorders that was first taught in 2020.

Year 2 - Respiratory Module – Smoking Cessation:

- Describe the physiological effects of smoking in people that lead to nicotine addiction.

- Detail the negative consequences of smoking.
- Describe the treatment algorithm for smoking cessation.
- Utilizing patient preference, recommend an appropriate pharmacotherapy regimen to assist a patient with quitting smoking. The student should know the mechanism of action, dosing, route, administration, monitoring and adverse effects of each therapeutic option.
- Be able to counsel on non-pharmacotherapeutic options to assist a patient with quitting smoking.
- Identify safety concerns related to e-cigarette use.

### Year 3 – Psychiatry Module – Therapeutics of Substance Use Disorders

- Define addiction, substance related disorder, substance use disorder, and substance-induced disorder
- Describe the prevalence of substance use disorders in Canada
- List the diagnostic criteria for substance use disorder per the DSM-V criteria
- Describe the CIWA-AR, and COWS scoring tools
- Compare and contrast the pharmacology, dosing/administration, efficacy, adverse effects, and interactions of the following medications for alcohol use disorder: Naltrexone, Acamprosate, Gabapentin, Topiramate, Disulfiram
- List the recommendations for harm reduction around cannabis use per the Canadian Guidelines
- Describe the COWS scoring tool
- Compare and contrast the pharmacology, dosing/administration, efficacy, adverse effects, and interactions of the following medications for opioid use disorder: methadone, buprenorphine/naloxone, buprenorphine long-acting injection, slow-release oral morphine, and iOAT (hydromorphone and diacetylmorphine) (slides provided)
- List recommendations for harm reduction around opioid use
- List the medications that have been reviewed for treatment of stimulant use disorder

### PHRM 450R: Supporting patients with substance use disorders: the pharmacist's role

- Describe how substance use disorders develop (brain & environmental factors)
- Consider the challenges associated with substance use disorders in terms of the patient and society.
- Explain stigma and how it impacts patient care and access to treatment.
- Compare and contrast addiction across the life span
- Describe common outcomes and comorbidities related to substance use disorders
- Describe harm reduction principles and strategies and why these are important in providing patient-centred care.
- Describe the general approach to treatment for individuals with substance use disorders (e.g., rehabilitation centres, hospitalization, out-patient support, pharmacological therapies).
- Explain the role of pharmacological therapies in the overall approach to substance use disorder treatment.

- Discuss various non-pharmacological therapies for substance use disorders, considering their role in treatment, theoretical underpinnings and their efficacy to support recovery and abstinence.
- Discuss the evidence related to prescription opioids leading to addiction, different models of opioid stewardship and its importance in minimizing opioid-use disorder in society.
- Demonstrate non-judgmental, empathetic, and professional attitude towards patients who have a substance use disorder, which continue to be associated with significant stigma.
- Enhance their awareness and understanding regarding addiction and substance use disorders in order to become a more compassionate health care provider.
- Reflect on and share their learning experiences.
- Apply learning to real-life cases.
- Develop and lead a class session on a topic of interest in the area of substance use disorders.

Note: Starting September 30, 2021 the College of Pharmacists of BC requires that all registrants who are employed in a pharmacy dispensing OAT must complete the BCPHA Opioid Agonist Treatment Compliance and Management Program for Pharmacy (OAT CAMPP).

## **9. School of Population and Public Health**

There is one graduate level elective course offered at SPPH that addresses substance use and addictions:

### SPPH 550: Public Health Approaches to Substance Use and Addictions

The general aim of this course is to engage students in a critical examination of public health strategies regarding substance use and related problems, in the context of a multidisciplinary approach.

On completion of the course, students are expected to be able to:

- Critically analyze examples of public health responses aimed at preventing, treating and managing substance use and related problems.
- Critique and appraise research and evidence-based approaches in this field.
- Acknowledge the diverse groups affected by substance use problems and think about person-centered approaches.
- Recognize the importance of a continued open public discussion around prevention, treatment and policy, translating the knowledge from the scientific evidence.
- Communicate research or proposals on addictions and substance use considering the personal, social, scientific and health policy context where that research or proposal occurs.
- Examine personal bias and gain some insight on others' bias when facing substance related issues.

## 10. School of Social Work

Both the two-year Bachelor of Social Work (BSW) degree program and the 8-12 month Advanced Master of Social Work (MSW) program have one elective course on substance use and addiction. There is no core course on this topic in either programs.

The learning objectives of both courses are:

### 1. To acquire knowledge in relation to:

- The core concepts in the field of addiction; historical and political context of addiction and drug policy
- Various theories related to etiology and treatment of addiction
- The principles of drug action and the physical and psychological effects of the major drugs of abuse (including stimulants, sedatives, opiates, hallucinogens, marijuana, alcohol, nicotine, and prescription drugs); bio-physiological mechanisms of addiction
- The roles and fields of practice of social workers in the field of addiction
- The larger context of drugs in our society and how our current criminal justice approach to drugs has failed and how our society would benefit from a public health model of controlling currently illegal drugs.

### 2. To develop skills in relation to:

- Engagement of those who are affected by drug use and other addictions
- Assessment of those affected by drug use and other addictions
- Intervention with those affected by drug use and other addictions
- Intervention at the individual, family, community, organizational, institutional, and public policy levels with respect to drug use and other addictions.

The course-specific descriptions are:

### SOWK 440B (001): Integrative Seminar in Social Work: Social Work Theory and Practice in Addictions (ELECTIVE)

This course will explore both the theory and practice needed to work in the field of addictions. This course covers a wide range of topics from specific counselling skills to the context of drugs in our society. A social justice, strengths-based, harm reduction orientation to substance use and addiction will be applied.

The course is divided into a number of different themes, specifically:

- (1) The course will explore addiction and recovery using attachment theory as a foundation.
- (2) A harm reduction-based approach to practice in the field of addiction will be examined.
- (3) Mainstream and emergent models of practice at the individual, family, group, community and policy levels will be examined. A number of practice models to addiction treatment will be explored. Selected emergent models of practice will also be discussed.
- (4) Social Justice will be explored throughout this course. Our society's primary response to illegal drug use and addiction is through the criminal justice system. The evidence shows that

this approach has failed. A new model based on social work, human rights and public health principles will be examined.

Participation in this course will allow students to familiarize themselves with the concept of addiction from a range of theoretical perspectives, with an emphasis on a bio-psycho-social-spiritual-environmental understanding of addiction.

#### SOWK 521: Social Work Practice in Addictions (ELECTIVE)

This course will provide participants with a theoretical, ethical and skills foundation for advanced social work practice in the field of addiction. The essentials of direct practice in the context of the structural, political and policy dimensions of addiction will be emphasized. A trauma-informed approach, strengths-based perspective, and harm reduction orientation to addiction will be applied.

The course is divided into three main parts:

- (1) definition of addiction and recovery, and focus on substance addiction; current and historical patterns in addiction and drug policy; effects of illicit, legally available and medicinal drugs; an overview of concurrent disorders;
- (2) etiology of addiction; and current and historical responses to drug use and addiction; overview of abstinence- versus harm reduction-based approaches to practice in the field of addiction;
- (3) mainstream and emergent models of practice at the individual, family, group, community, organizational and policy levels. Several practice models to addiction treatment will be examined, with an emphasis on strengths-based harm reduction psychotherapy and motivational enhancement therapy.

Participation in this course will allow students to familiarize themselves with the concept of addiction from a range of theoretical perspectives, with an emphasis on a biopsychosocial-spiritual/ecological understanding of addiction, strengths-based harm reduction as a practice orientation, and the transtheoretical model as a form of meta-theory.

The course will emphasize the perspective of people struggling with addiction, and the social responsibilities of service providers to the needs of addiction service consumers.

## Okanagan Campus

### 1. Human Kinetics

The Clinical Exercise Physiology concentration of the four-year Bachelor of Human Kinetics program has some exposure to substance use and addictions within the HES 356 Health Behaviour Change for Chronic Disease Management course. Namely, around awareness and recognition, developing risk reduction strategies with clients, and working with and referrals to other health professionals.

### 2. Medicine

\*see details under Vancouver campus

### 3. Nursing

The Bachelor of Science in Nursing (BSN) program threads content in relation to social determinants of health, harm reduction and pain management throughout the four-year curriculum. In addition, the following substance use and addiction content is taught in year 2 of the core NURS 226 Health and Healing, and NURS 229 Mental Health in Nursing courses:

- Alcohol withdrawal assessment scoring (CIWA) and related care
- Interconnectedness of mental health and substance use and addiction
- Introduction to providing pharmacological management for support across the continuum of care for substance use and addiction
- Providing pain management for patients with substance use and addiction Introductory knowledge of safer prescribing practices

Lastly, the NRSG 428: Advanced Community Health Nursing elective includes the following learning objective: Apply knowledge about community health assessment, planning and evaluation to a proposed strategy to address a health issue for a specific vulnerable population (e.g. groups affected by mental illness, addiction or intentional/unintentional injuries).

## Appendix 4: Examples of placements where students may get exposure to substance use and addiction

	1	2	3	4	5	6
Dental Hygiene	Elizabeth Fry Society of Greater Vancouver	John Howard Society Pacific	Downtown Community Court	Drug Treatment Court	Pioneer Community Living Association	Union Gospel Mission
Dietetics	inpatient & outpatient mental health services	inpatient medical units	Primary care services & home care	Fir square - BC Women's		
Medicine	Vancouver General Hospital	St. Paul's Hospital				
Nursing	BCMHA	Burnaby Hospital Psychiatry	MSJ Hospital	VGH (Segal)	Colony Farms Forensics	Community Mental Health Care (DTES and Coast MH)
Nursing (UBCO)	Hospital acute mental health sites	Hospital emergency department mental health unit	outreach urban health	community mental health services	child/youth mental health services	hospital emergency departments
Nurse Practitioner	Specialized GP offices	Specialized NP clinics with Health Authority				
Occupational Therapy	Any physical dysfunction setting- acute care, rehab, home and community care					
Physical Therapy	Central Interior Native	Carrier Sekani Family Services	DTES outreach			

	Health Society					
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## Appendix 5: Addiction Care and Treatment Online Course

The Addiction Care and Treatment Online Course (ACTOC) is a free online certificate course that provides comprehensive substance use education for health care professionals at any level. This free, self-paced, CME accredited course aims to strengthen competencies in the diagnosis and treatment of patients with substance use disorders using evidence-based treatments along a continuum of care. Uniquely, ACTOC covers a full range of substance use disorders, including alcohol, tobacco, stimulants, cannabis, and opioids. This course helps address the current lack of support for patients with substance use disorders by providing the education and tools required to implement change within clinical practice. The course can be found here: <http://www.bccsu.ca/about-the-addiction-care-and-treatment-online-certificate/>

This comprehensive program consists of 22 different modules across the spectrum of substance use disorders and each module draws from current literature, recommendations from evidence-based guidelines, and is created in collaboration with experts in the field. Learners can pick and choose which modules to complete based on their personal learning objectives.

### Course Content

1. Overview of Substance Use and Addiction
2. Screening and Care Planning
3. Alcohol Use Disorder
4. Tobacco Use Disorder
5. Opioid Use Disorder
6. Stimulant Use Disorder
7. Cannabis Use Disorder
8. Co-occurring Substance Use Disorders
9. Concurrent Mental Health and Substance Use Disorders
10. Specialized Assessments
11. Safe Prescribing
12. Pain and Substance Use Disorder
13. Common Medical Complications
14. Overview of Harm Reduction
15. Safer Drug Consumption and Overdose Prevention
16. Psychosocial Treatment Interventions and Recovery-Oriented Supports
17. Substance Use Care for 2SLGBTQ+ People
18. Legal, Policy and Ethical Implications
19. Pregnancy and Substance Use Disorders
20. Older Adults and Substance Use
21. Case Review
22. Consolidating Knowledge