

YMU_Substance Use and Public Health

Course: Substance Use and Public Health [物質使用與公共衛生] (0113071031154) [健康促進與行為科學]

Lecturers: Chuan-Yu Chen, PhD , Sabrina Wang, PhD, Sheng-Chang Wang, MD, MSc

Goals: This course is intended to help students interested in the issues of alcohol, tobacco, and other illegal drug use and problems from the perspective of public health.

Course description: The course will provide the students a concrete understanding of substance use and associated problems from a variety of perspectives (e.g., history, sociology, psychology, medicine, and laws).

Time: Wednesday 8:10-10:00

Location: 公衛 221 室

Syllabus:

09/16	1.	Course overview and introduction
09/23	2.	What: alcohol and tobacco
09/30	3.	What: Illegal drugs (I)
10/07	4.	What: Illegal drugs (II)
10/14	5.	What: natural history of substance use disorder
10/21	6.	What and where: measurement and distribution (7:30)
10/28	7.	What and where: drug use among special populations (e.g., underage)
11/04	8.	What and where: Substance use related negative consequences
11/11	9.	Mid-term exam/mid-term report (media critics)
11/18	10.	Why: etiology and mechanism (I): neuroscience Dr. Sabrina Wang
11/25	11.	Why: etiology and mechanism (II): psycho-sociological perspective
12/02	12.	How: prevention and intervention
12/09	13.	How: treatment (Dr. Sheng-Chang Wang)
12/16	14.	How: drugs policy, politics, and laws
12/23	15.	Substance use in the context of public health
12/30	16.	Student presentation

Office hours: TBA.

Course requirement:

Group assignment: The topic of group projects can be chosen from one of the following

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issues. Each project shall have one team of 2-3 students. Examples may include

- ✓ Criminal regulation over drunk driving
- ✓ Drug urine test in underage population (e.g., middle and high school-aged)
- ✓ Special schools for youngsters using illegal drugs
- ✓ Schedule upgrade for ketamine: from schedule III to schedule II
- ✓ Forced treatment on heroin users
- ✓ Routine urine test for pregnant women
- ✓ Treatment for substance use disorder by National Health Insurance Plan
- ✓

1. Mid-term: Analytic summary and critics.

- ✓ On the basis of the chosen topic (together with lecture taught and assigned readings), locating three or more relevant news/reports (in any kind of media format) and summarizing content, hidden messages (or premises), potential gaps/problems, and further suggestions.
- ✓ Mid-term report: oral presentation 30% (less than 10 slides).
- ✓ **One-page outline for the final report**

2. Essay:

- ✓ On the basis of an assigned reading, write down your reflection, comments, and suggestions (to Taiwan), in terms of research, practice, or policy.
- ✓ **Must turn in before December 31st, 2020**

3. Final report:

- ✓ On the basis of the chosen topic (together with lecture taught, assigned readings, and other academic papers/reports), write a report that (i) succinctly describe the nature and content of problems; (ii) the issues of debates (or gaps); (iii) available evidence/knowledge that may provide different perspectives toward the issue of concern.
- ✓ Final report: oral and written report (40%; less than 25 pages).

Grading criteria: Course grades will be evaluated on four domains (1) 10%: class participation; (2) 20%: paper essay; (3) 30%: mid-term presentation; and (4) 40%: final project (term paper & presentation).

Required Readings:

1. ATLAS 2010: First global report on substance use disorders http://www.who.int/substance_abuse/publications/Media/en/index.html
2. Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health, 2016, Washington, DC
3. National Research Council (2001), Informing America's Policy on Illegal Drugs: What We Don't Know Keeps Hurting Us. Committee on Data and Research for Policy on Illegal Drugs. Charles F. Manski, John V. Pepper, and Carol V. Petrie, editors. Committee on Law and Justice and Committee on National Statistics. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Recommended additional readings:

1. World Health Organization. ATLAS on Substance Use (2010) - Resources for the prevention and treatment of substance use disorders. World Health Organization. Global strategy to reduce the harmful use of alcohol http://www.who.int/entity/substance_abuse/msbalcstrategy.pdf
2. World Health Organization. Global health risks. Mortality and burden of disease attributable to selected major risks. http://www.who.int/healthinfo/global_burden_disease/global_health_risks/en/index.html
3. World Health Organization. Guide to drug abuse epidemiology. Geneva: World Health Organization, 2000. http://whqlibdoc.who.int/hq/2000/a58352_PartA.pdf
4. UNODC. World drug report 2020. <https://wdr.unodc.org/wdr2020/>
5. Ray O, Ksir C. Drugs, Society, and Human Behaviors. 15th edition. McGraw-Hill Companies.

Video

1. Heroine: <https://www.netflix.com/tw/title/80192445>
2. Recovery boys: <https://www.netflix.com/tw/title/80177782>
3. The truth about alcohol: <https://www.youtube.com/watch?v=PNq-JcVIYD4>
4. Dr Sanjay Gupta: Weed - CNN Special Documentary <https://www.youtube.com/watch?v=-SZzgyXhJI&feature=youtu.be>
5. Understanding the opioid epidemic <http://www.pbs.org/wned/opioid-epidemic/watch/>
6. One nation, overdosed <https://www.msnbc.com/msnbc/watch/one-nation-overdosed-full-documentary-1090402883583?v=railb&>

Lecture 1: Course overview and introduction

- Chapters 1 & 4. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Leshner AI. Addiction is a brain disease, and it matters. *Science* 1997;278:45.
- ✓ Room B. Stigma, social inequality and alcohol and drug use. *Drug and Alcohol Review* 2005; 24:143-55.

Lecture 2: Alcohol and tobacco

- Chapters 9, 10, 11, 12. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Kandel D. Stages in adolescent involvement in drug use. *Science*. 1975;190(4217):912-4
- ✓ Rehm J, Mathers C, Popova S, Thavorncharoensap M, Teerawattananon Y, Patra J. Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*. 2009 Jun 27;373(9682):2223-33.

Lecture 3: Illegal drugs I

- Chapters 14 & 15. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Nutt D, King LA, Saulsbury W, Blakemore C. Development of a rational scale to assess the harm of drugs of potential misuse. *Lancet*. 2007 Mar 24;369(9566):1047-53.
- ✓ Nelson ME, Bryant SM, Aks SE. Emerging drugs of abuse. *Emerg Med Clin North Am*. 2014 Feb;32(1):1-28

Lecture 4: Illegal drugs II

- Chapters 6, 7, 13. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Warner-Smith M, Darke S, Lynskey M, Hall W. Heroin overdose: causes and consequences. *Addiction*. 2001;96(8):1113-25
- ✓ Courtney KE, Ray LA. Methamphetamine: an update on epidemiology, pharmacology, clinical phenomenology, and treatment literature. *Drug Alcohol Depend*. 2014;143:11-21.

Lecture 5: Natural history of drug dependence

- Chapter 2. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-

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Hill Companies.

- ✓ Hser YI, Hoffman V, Grella CE, Anglin MD. A 33-year follow-up of narcotics addicts. *Arch Gen Psychiatry*. 2001;58(5):503-8
- ✓ Sarvet AL, Hasin D. The natural history of substance use disorders. *Curr Opin Psychiatry*. 2016;29(4):250-7.

Lecture 6 Measurement and distribution

- ✓ Compton WM, Thomas YF, Conway KP, Colliver JD. Developments in the epidemiology of drug use and drug use disorders. *Am J Psychiatry*. 2005;162(8):1494-502.
- ✓ Richter L, Johnson PB. Current methods of assessing substance use: A review of strengths, problems, and developments. *Journal of Drug Issues*, 2001, 31(4), 809-832.

Lecture 7 Drug use among special populations

- ✓ Degenhardt L, Stockings E, Patton G, Hall WD, Lynskey M. The increasing global health priority of substance use in young people. *Lancet Psychiatry*. 2016;3(3):251-64.
- ✓ Lester BM, Andreozzi L, Appiah L. Substance use during pregnancy: time for policy to catch up with research. *Harm Reduction Journal*, 2004. 1

Lecture 8 Substance use related negative consequences

- Chapter 5. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Winstanley EL, Gust SW, Strathdee SA. Drug abuse and HIV/AIDS: international research lessons and imperatives. *Drug Alcohol Depend*. 2006;82 Suppl 1:S1-5.
- ✓ Roerecke M, Rehm J. Cause-specific mortality risk in alcohol use disorder treatment patients: a systematic review and meta-analysis. *Int J Epidemiol*. 2014;43(3):906-19

Lecture 10 Etiology and mechanism (neuroscience)

- ✓ Volkow ND, Li TK. Drug addiction: the neurobiology of behaviour gone awry. *Nat Rev Neurosci*. 2004 Dec;5(12):963-70.
- ✓ Hyman SE, Malenka RC, Nestler EJ. Neural mechanisms of addiction: the role of reward-related learning and memory. *Annu Rev Neurosci*. 2006;29:565-98.
- ✓

Lecture 11 Etiology and mechanism (psychosocial)

- ✓ Tiffany ST, Conklin CA, Shiffman S, Clayton RR. What can dependence theories tell us about assessing the emergence of tobacco dependence? *Addiction*. 2004 Jun;99 Suppl 1:78-86

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- ✓ Adrian M. How can sociological theory help our understanding of addictions? *Subst Use Misuse*. 2003;38(10):1385-423.

Lecture 12 Prevention and intervention

- Chapter 17. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Spoth R, Greenberg M, Turrisi R. Preventive interventions addressing underage drinking: state of the evidence and steps toward public health impact. *Pediatrics*. 2008 Apr;121 Suppl 4:S311-36
- ✓ Allen ML, Garcia-Huidobro D, Porta C, Curran D, Patel R, et al. Effective Parenting Interventions to Reduce Youth Substance Use: A Systematic Review. *Pediatrics*. 2016;138(2).
- ✓ UNODC/WHO International Standards on Drug Use Prevention. Second updated edition. <https://www.unodc.org/unodc/en/prevention/prevention-standards.html>

Lecture 13 Treatment for drug-related problems

- Chapter 18. Ray O, Ksir C. *Drugs, Society, and Human Behaviors*. 16th edition. McGraw-Hill Companies.
- ✓ Volkow ND, Frieden TR, Hyde PS, Cha SS. Medication-assisted therapies--tackling the opioid-overdose epidemic. *N Engl J Med*. 2014 May 29;370(22):2063-6.
- ✓ Glasner-Edwards S, Rawson R. Evidence-based practices in addiction treatment: review and recommendations for public policy. *Health Policy*. 2010 Oct;97(2-3):93-104.
- ✓ Reuter P, Pollack H. How much can treatment reduce national drug problems? *Addiction*. 2006 Mar;101(3):341-7.

Lecture 14 Drugs: policy, politics, and laws

- ✓ Goldstein A, Kalant H. Drug policy: striking the right balance. *Science*. 1990 Sep 28;249(4976):1513-21
- ✓ Kalant H. Drug classification: science, politics, both or neither? *Addiction*. 2010;105(7):1146-9.
- ✓ Ritter A, Bammer G. Models of policy making and their relevance for drug research. *Drug Alcohol Rev* 2010; 29(4):352-7.

Lecture 15 Substance use in the context of public health

- ✓ Csete J, Kamarulzaman A, Kazatchkine M, et al., Public health and international drug policy. *Lancet*. 2016 Apr 2;387(10026):1427-80.

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- ✓ Kolodny A, Courtwright DT, Hwang CS et al., The prescription opioid and heroin crisis: a public health approach to an epidemic of addiction. *Annu Rev Public Health*. 2015 Mar 18;36:559-74

相關書籍

1. 上癮五百年 (Forces of Habit). Courtwright DT (薛絢 譯): 立緒文化事業公司. ISBN: 9868024897.
2. 毒品 (The Pursuit of Oblivion: A Global History of Narcotics). Richard Davenport-Hines (鄭文 譯), 時報出版社. ISBN : 9571338710.

Mid-term report

1. On the basis of the chosen topic (together with lecture taught and assigned readings), locating at three or more relevant new/reports (in any kind of media format) and summarizing content, hidden messages (or premises), potential gaps/problems, and further suggestions.
2. Each presentation should be limited to 10 slides (including references).
3. **One-page handout for the final report**

Academic essay

1. On the basis of an assigned reading, write down your reflection, comments, and suggestions (to Taiwan), in terms of research, practice, or policy.
2. The essay will be graded on the basis of logic flow and thoroughness.
3. Each essay should be limited to 3 pages (including reference).
4. In English (times new roman,12, 1.5 space); In Chinese (標楷體 , 1.5 倍行距)

Final report

1. Each proposed project should be limited to 25 pages (including references).
2. In English (times new roman,12, 1.5 space); In Chinese (標楷體 , 1.5 倍行距)
3. The structure of report covers abstract, introduction (why this topic matters), the points to support/refute the topic per se, empirical evidence summary (what you have found, in terms of scientific evidence), and discussion.
4. Line Spacing: 1.5 space
5. Reference: less than 50 citations