## The Neurobiology of Drug Dependence PSY5121HF (Wed 10:00-noon; SS560A)

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## **COURSE DESCRIPTION**

This course is designed to provide an overview of current topics in the field of drug addiction research, with a specific focus on the neuroscience of addiction. In the first part of the course, consideration will be given to the prevailing "Disease Model" of addiction, including current theories on which it is based, what are its main tenets, and how it informs public policy. Subsequently, a critique of the "Disease Model" will be offered and alternative views will be considered. The second part of the course will comprise a series of student-led seminars and discussions on a specific problem in the addiction field, with a focus on how neuroscience research is addressing the problem, and what its implications are for the "Disease Model" of addiction.

## SUMMARY OF COURSE EVALUATION

Seminar	30%
Position Paper 1	20%
Position Paper 2	35%
Class Participation	15%

#### BLACKBOARD

This course will be organized and managed using the U of T *Blackboard* system. Blackboard will be used to make class announcements, and to manage course materials.

## SCHEDULE OF CLASSES

<b>Week 1</b> Jan 8	Introduction and overview
<b>Week 2</b> Jan 15	"Disease Model" of Addiction: Consideration of the "NIDA paradigm" (assigned readings will be posted on Blackboard)
<b>Week 3</b> Jan 22	An alternate (non-medical) view of addiction: "Dislocation Theory" (Bruce Alexander, 2008) (assigned readings will be posted on Blackboard)
<b>Week 4</b> Jan 29	Reconciling (or not) disease- and non-disease models of addiction (assigned readings will be posted on Blackboard)
<b>Week 5</b> Feb 5	Drug Policy and Addiction (assigned readings will be posted on Blackboard)
<b>Week 6</b> Feb 12	Individual student meetings on seminar topics (Position Paper 1 due)
<b>Week 7</b> Feb 19	READING WEEK
<b>Week 8</b> Feb 26	Student-led seminar/discussion
<b>Week 9</b> Mar 5	Student-led seminar/discussion
<b>Week 10</b> Mar 12	Student-led seminar/discussion
<b>Week 11</b> Mar 19	Student-led seminar/discussion
<b>Week 12</b> Mar 26	Student-led seminar/discussion
<b>Week 13</b> Apr 2	Student-led seminar/discussion

## **COMPONENTS OF COURSE EVALUATION**

#### **SEMINAR**

30%

Students will lead a full class period, either alone or with a partner, aimed at addressing a specific and provocative problem in the addiction field. In an oral presentation and guided discussion, students will explore how research in neuroscience informs the problem, and what the current opinion/s on the problem are in the field. The discussion should be aimed at considering different points of view on the same problem, and facilitating debate on what viewpoint is best supported by current work in the field. Although the presenter will not be required to take a position in the course of the presentation, they will be required to articulate a position in the second "Position Paper" (see below). Thus, the discussion should be viewed as an opportunity for the presenter to further develop his/her position on the problem.

Suggested questions and topics that students may choose to explore are listed below. Students may also develop an alternative question in consultation with me. Students are asked to submit 2-3 questions that they would like to develop (in order of preference), and 2-3 dates that they would like to present on, by Jan 22. I will approve topics and assign dates by Jan 29. If students wish to present on a topic other than one listed below, they should arrange to speak with me about their ideas before Jan 22.

For each presentation, 2 to 3 readings should be assigned to the rest of the class, one week before the scheduled presentation. Citations of articles or PDFs can be sent to me and I will post them on *Blackboard*.

#### **POSITION PAPER 1**

Students will write a 5-7 page paper, based on the assigned readings and corresponding discussion during Weeks 2-5 of class. In the paper, the student will take a specific position on the relative value of the "Disease" over alternate (e.g., Dislocation Theory) models of addiction, and whether the different models can be reconciled. Arguments should be built with specific reference to the papers discussed in class; however, students may include additional references, if they wish to. Papers will be graded for the strength and clarity of the argument that is developed, and the quality of the writing. Papers are due in class on Feb 12.

#### **POSITION PAPER 2 (REVIEW)**

The second Position Paper will evolve from the student's seminar topic. Papers should be 15-20 pages in length and include reference to a minimum of 10 key papers from the primary literature, in addition to any of the assigned readings from the first half of the course. In the paper, the student will take a specific position on the question he/she

20%

35%

developed in their seminar, and develop an argument based on ideas from the first part of the course and readings from the primary literature. Papers will be graded for the strength and clarity of the argument that is developed, the pertinence of the literature reviewed, the accuracy of the literature review, and the quality of the writing. Papers are due to me in hard copy on April 7.

## **CLASS PARTICIPATION**

15%

Students will be graded for attendance and participation in class discussion. Although students will not be evaluated directly on the weekly reading assignments, their level of familiarity with the literature will be reflected in the level and quality of participation in class discussions. As well, students will be asked to come prepared for each class with at least 2 discussion questions, based on their understanding of the readings.

## **TOPIC IDEAS FOR SEMINAR AND "POSITION PAPER 2"**

1. Is drug addiction an addiction like any other?

2. Are drug addicts necessarily "out of control"?

3. Does pharmacotherapy hold promise in the treatment of addiction? Will a "magic bullet" be found?

4. Do mindfulness-based interventions hold promise in the treatment of addiction? How do these interventions compare in efficacy to more conventional forms of intervention (e.g., 12-step approaches, maintenance therapies, etc)?

# **ASSIGNED READINGS**

January 15