Neurobiological Basis of Psychological Issues (PSYC 2111)
First Semester, 2021-2022

INSTRUCTOR
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Consultation: By Appointment

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COURSE OBJECTIVES

Human behavior is generated by complex psychophysiological mechanisms of the brain. This course is designed to provide a broad introduction to the biological basis of stress, emotion, and regulation of cognitive-affective processes affecting psychological health. The neurobiological basis of psychopathologies e.g., depression and anxiety, will be examined as examples to demonstrate the complex relationships between brain, behavior, and psychopathology.

COURSE LEARNING OUTCOMES

On completing the course, students will be able to:

a. Achieve a fundamental understanding of the biological explanations of psychological issues, specifically pathological conditions
b. Complete basic theoretical and research methodological and mechanical training that enable their better understanding of biopsychosocial relationships
c. Acquire ability to critically evaluate the quality of psychobiological research and studies

COURSE CONTENTS AND TOPICS

1. Neural basis of emotion processing and regulation
2. Stress and mental health
3. Depression
4. Anxiety
5. Substance use
6. Behavioral addiction (Gambling and Substance Dependence)

PRE-REQUISITE

PSYC 1001: Introduction to Psychology

RECOMMENDED TEXTBOOK

No recommended textbook. Any online information about brain structure and function, or psychological disorders, is useful for preparing the course.

LECTURE ARRANGEMENT

All lectures will be available face-to-face and live online via Zoom. To encourage attendance in lectures, all lecture recordings will be uploaded onto Panopto by Friday afternoon, and will be available until Sunday 23:59.
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<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topics</th>
<th>Readings</th>
<th>Tutorial Topics</th>
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<td>2. Evans et al., Childhood poverty, chronic stress, and adult working memory. PNAS, 2009;106:6545-6549.</td>
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<td>5.</td>
<td>01-Oct-2021</td>
<td>No class (National Day)</td>
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<td>15-Oct-2021</td>
<td>Reading week</td>
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disorders: epidemiology, general risk factors, and the neuroscience approach (Part 2, 1 hour)


9. 29-Oct-2021 Affective Dysregulation and Major Depressive Disorder


10. 05-Nov-2021 Major Depressive Disorder and Sleep Disturbances


11. 12-Nov-2021 Addiction: Substance Dependence


| 13. | 26-Nov-2021 | Final Exam (2 hours) |

**Drop-in Tutorial Sessions**

Thursday 09:30 – 10:20 (via Zoom);
Friday 10:30 – 11:20/11:30 – 12:20 CPD LG 36 (Face-to-Face)

**Tutorial 1**
How to Critique Journal Articles?

**Tutorial 2**
Journal Critique Outline Q&A

**Tutorial 3**
Revision for Mid-Term Quiz

**Tutorial 4**
Essay Writing Preparation

**Tutorial 5**
Essay Outline Q&A

**Tutorial 6**
Revision for Final Quiz

**IMPORTANT DATES**

| Critique Title Approval | 30/09/2021 23:59 | Submission via Moodle |
| Journal Critique | 08/10/2021 23:59 | Submission via Moodle |
| Mid-Term Quiz | 22/10/2021 Lecture time | Online via Moodle |
| Essay | 19/11/2021 23:59 | Submission via Moodle |
| Final Quiz | 26/11/2021 Lecture time | Online via Moodle |

**ASSESSMENTS**

**QUIZZES (MID-TERM: 15%; FINAL: 35%)**
The quizzes will consist of questions requiring short answers. You will be tested on materials from lecture recordings, lecture slides, readings and class discussions. All quizzes will be conducted during lecture time, according to Hong Kong Time (HKT) zone.

**JOURNAL CRITIQUE (20%)**
You are required to submit a journal critique. You may choose from the list of readings or identify from your own literature review. If you choose to identify your own article, the article will need to be within the scope of this course. Your critique will need to include multiple perspectives, in which two of those domains must be (i) theoretical perspective, and (ii) methodology/design perspective. All articles must be submitted for approval by 30 September 2021. The word limit for journal critique is between 1000 and 1500, excluding references. A penalty of 10% deduction will be applied to word count outside this range. Each student must declare along with the journal critique stating that it is his/her own work. You may refer to the marking rubrics for more details.

**ESSAY (30%)**
You are required to submit an essay on the neurobiological basis of psychological issues in APA format. The word limit for the essay is between 1500 and 2000, excluding references. A penalty of 10% deduction will be applied to word count outside this range. Each student must declare along
with the essay stating that it is his/her own work. Instruction guide and rubric will be available after Mid-Term quiz.

LATE ASSIGNMENT POLICY

Late assignment is subjected to a penalty of 50% deduction per day unless a valid medical proof (medical certificate) is presented.

FEEDBACK POLICY

Student may expect to receive feedback within three or four weeks after submitting written assignments and taking each quiz. Quiz papers will not be returned to students; however, students can get individual feedback about each exam through meeting with course instructor/tutor. Weekly consultation hours can be set up for individual consultation. For other coursework assignments, students receive feedback immediately or within an appropriate timeframe depending on the nature of the assignments.

MAKE-UP QUIZ POLICY

In the case of a student missing the mid-term or final due to medical reason (with a valid medical proof), a make-up quiz in a different format can be arranged within one week after the quiz/exam. Requests for make-up should be sent by email to the tutor coordinator, Miss. Jenny Lee (wwjd@hku.hk) within 24 hours of the original day of examination. In normal circumstances, requests made afterwards will not be catered. There will be no make-up quizzes arranged for a make-up quiz.

ACADEMIC DISHONESTY

Academic dishonesty will not be tolerated. Any student who engages in any form of academic dishonesty (e.g., cheating on exams, plagiarism, self-plagiarism, interfering with grading, falsification and fabrication of data in any academic exercise etc.) will receive a grade of F on the component(s) of assessment concerned or in this course and will be reported to the Department/Faculty Office/University Disciplinary Committee for further disciplinary action. There will be no exceptions. If you are not sure what constitutes the academic offense of plagiarism, the University has published a booklet entitled “What is Plagiarism?” (checkout the webpage at https://tl.hku.hk/plagiarism/). Department of Psychology has formulated departmental polies/guidelines on student misconduct. Visit the website at https://psychology.hku.hk/useful-information-to-current-students/ for more information.

PLAGIARISM

A softcopy is required for all written assignments. The softcopy will be checked for plagiarism against a database of articles, books, webpages, and essays submitted by students at HKU and other universities. No credit will be given for an assignment that contains plagiarized materials. Further penalties will also be applied. These penalties include a zero mark for participation in course tutorials and a zero mark for the course. Plagiarism will also be reported to Department/Faculty Office/University Disciplinary Committee for consideration of possible disciplinary action.

Plagiarism is copying the work of another person without proper acknowledgement. There are two parts in the definition: copying and the absence of proper acknowledgement. As a result, it gives an impression to an ordinary reader that the work is the original work of the author when in fact it was copied from some others’ work. Copying does not necessarily only mean copying word for word.
Closely paraphrasing or substantial copying with minor modifications (such as changing grammar, adding a few words or reversing active/passive voices) is still copying for this purpose. It does not matter what the nature of the source is: it may be a book, an article, lecture notes or simply an assignment of another student, or in electronic form such as a website, an audio-visual production or other non-textual material, to name but a few. It does not matter whether the source has been published or not. Plagiarism covers any form of work submitted for assessment, including theses, dissertations, take-home examinations, assignments, projects and other forms of coursework.

Students are strongly advised to read the booklets "What is Plagiarism?" (http://www.hku.hk/plagiarism/) and "Plagiarism and How to Avoid it" (http://www4.caes.hku.hk/plagiarism/) and to consult your teachers if you have any questions on the definition of plagiarism and how to avoid it. Students are also advised to familiarise themselves with issues in relation to copyright as publicized in the section on "Copyright and Plagiarism" in the Student Handbook (http://www.handbook.hku.hk/ug/). These guidelines cover lecture notes, course materials, photocopies, internet materials as well as dissertations.

Students should read these guidelines carefully and revisit them from time to time.