

Brain, Mind and Behavior MCB W61

Three (3) semester credits

Course Description

This course deals with the structure and function of the human nervous system, with an emphasis on how brain physiology and chemistry are related to human behavior. This is a comprehensive introduction to the exciting field of contemporary neuroscience for students of ALL backgrounds and interests.

Prerequisites

There are no prior course requirements.

Instructor Information, Contact, Office Hours, & Communication

Course Instructor

Dr. David Presti
249 Life Sciences Addition (LSA)
Phone and voicemail: 510-643-2111

Graduate Student Instructors (GSIs)

While the instructor will interact with the whole class and will oversee all activities and grading, as well as being available to resolve any issues that may arise, the GSIs will be your main point of contact. Your GSIs are responsible for assisting you directly with your questions about assignments and course requirements, as outlined in the Assignments and Calendar. The GSIs will also facilitate ongoing discussion and interaction with you on major topics in each module.

- David Arroyo
- Julia Varshavsky

Office Hours

The course instructor and GSIs will offer both in person and virtual office hours, when students can communicate real time (synchronously) using the Chat tool. While these chats are optional they can be valuable for discussion, answering questions, and reviewing for exams. Chats are optional; no points are awarded for participation.

Check the course Calendar for office hour times.

Course Mail

Make sure to check the Course Mail for messages from the instructor. You can access course email within the Learning Management System by clicking on the Inbox link on the Corner Help toolbar (see also [Canvas Overview Video](#)) or choose to have your course mail forwarded to your personal email account or your cell phone.

Question & Answer Forum

Please use this forum to post questions about the course material, assignments, the learning management system or online homework. **The instructor/GSIs will monitor this forum**, but you should also feel free to post answers to help other students. This helps to create a general FAQ so that all students in the course may benefit from the exchange.

Course Materials and Technical Requirements

Required Materials

- *An Introduction to Brain and Behavior* by Brian Kolb and Ian Whishaw (any edition: 4th edition, 2014; 3rd edition, 2011; OR 2nd edition, 2006).
- *The Double Helix* by James Watson (any edition: all editions have the same original text, first published in 1968).

Comments on the Textbooks

The primary textbook for this class is *An Introduction to Brain and Behavior* by Brian Kolb and Ian Whishaw. It is currently in its 4th edition, published in 2014. If you have a copy of the 3rd edition (2011) or the 2nd edition (2006), this is fine, as these three editions are sufficiently similar. Note that some of the chapter and figure numbers referred to in the lectures may vary, as the lecture material was originally recorded with the 2nd edition in mind.

The learning objectives of this class can be met by assimilating the material from the lectures and from reading *The Double Helix*. The exams will be based on material from the lectures and from *The Double Helix*. Thus, the *Brain and Behavior* textbook is not technically required. However, in order to get the most from this class and to truly appreciate this subject, reading along in the textbook is very highly recommended. There is a very large amount of material to assimilate in six weeks time and having the

additional well-illustrated and well-written anchor of the textbook will likely prove highly beneficial.

Reading *The Double Helix* is required for this class and broad content questions from this book will be on the exams. Although this book does not deal specifically with the subject of “Brain, Mind, and Behavior,” it does describe a pivotal event in the history of 20th century biology that sets the stage for events related to the unfolding of cellular and molecular neuroscience. Understanding the conceptual framework articulated in the story of *The Double Helix* is an important part of the philosophy of this class. *The Double Helix* was written by James Watson and first published in 1968. It has been reissued several times since then. Any edition of this book will suffice, as the original text has never been revised and is the same in all editions. *The Norton Critical Edition* edited by Gunther Stent is recommended because of the inclusion of excellent supplementary material. If you have this edition, then it is also recommended that you read Gunther Stent’s historical introduction and summary of the book reviews. You will not be responsible on exams for parts of the book other than the primary text by Watson. However, if you wish to get the most from this class, the reading of Stent’s historical commentary on *The Double Helix* is highly recommended.

Technical Requirements

This course is built on a Learning Management system (LMS) called Canvas and you will need to meet these [computer specifications to participate within this online platform](#).

Optional

Canvas allows you to record audio or video files of yourself and upload them in the course. Although doing so is not required for any of the activities, using these features will enhance your engagement in the course. If you would like to use these features, you will need to have a webcam and a microphone installed on your computer.

Technical Support

If you are having technical difficulties please alert one of the GSIs immediately. However, understand that neither the GSIs, nor the professor can assist you with technical problems. You must call or email tech support and make sure you resolve any issues immediately. Be sure to document (save emails and transaction numbers) for all interactions with tech support. **Extensions and late submissions will not be accepted due to “technical difficulties”.**

For 24/7 Tech Help Support: Call **1-855-308-2758** or e-mail support@instructure.com

Learning Activities

VERY IMPORTANT

You won't be able to access your course material until you read and make your pledge to Academic Integrity. Click the link below to navigate to and complete the Academic Integrity pledge.

ACADEMIC INTEGRITY

You are expected to fully participate in all the course activities described here.

This course is designed to provide the student with a survey of the mind, brain, and behavior. A variety of learning activities are designed to accommodate diverse learning styles and build a community of learners. Learning activities for this course include the following:

1. Read the assigned textbook pages
2. Watch and listen to the lecture presentations
3. Read web-based announcements and postings assign during the course
4. Compose and post assigned responses to lectures and readings
5. Complete the midterm exam and final exam
6. Complete writing assignments

Sections

For grading purposes, each of you has been assigned to one of the course GSIs and placed within his/her section. Your particular GSI will grade all of your work, as well as that of your section-mates, and engage with you in the course discussions. You can see whose section you've been placed in by exploring the "Section" column within the "People" page or by examining your discussion group's title, which includes your GSI's name.

Modules

A module is a grouping of topics related to one area of study, typically with readings, lectures and various kinds of assignments. Each module contains a list of Learning Outcomes for the module. Your assignments reflect the learning activities to perform to reach those outcomes. For an at-a-glance view of due dates and projects, refer to the course Calendar.

Reading Assignments

Read the assigned chapters for each weekly module. View the assigned multimedia lecture presentations. The module's key concepts and multimedia lectures will provide an overview to assist you in focusing your study for assignments and exams. Specific reading assignments and multimedia lectures are listed in each respective module.

Multimedia Lectures

Recorded lectures support your readings and assignments but also contain additional material that may be included in the exams. Each lecture has been broken into sections. You are expected to take notes while viewing the lectures as you would in a regular classroom.

Homework Assignments

Students will be required to complete 4 writing assignments based on the reading assignments and weekly lectures.

1. [Homework assignment 1](#) is a description and analysis of an article which you find from the news media and is due Week 2. **Please refer to the assignment and/or calendar for due dates.**
 - o Your assignment is to find a news report, appearing within the past 3 months, about a topic in neuroscience, brain research, biological psychology, or whatever we wish to call these areas of study. The report should be from a news-media publication, not from a scientific journal. Then, IN YOUR OWN WORDS, write a summary description (150 to 300 words in length) of the news item, including a COMPLETE REFERENCE CITATION to the source of the news item. See the [UC Berkeley Library Citation Page](#) for citation guidelines; use either APA or MLA style. Your summary description should convey the essence of what the news report is about and why you find it interesting. If there are parts of the report that are not clear to you, indicate what these are. We repeat, it is important that your description of the article be IN YOUR OWN WORDS. You should not simply copy material from the text of the article.
2. [Homework assignment 2](#) is drawn from your reading of *The Double Helix* and is due Week 2.
 - o In reading *The Double Helix*, you come to learn not only about the process by which the great scientific discovery of DNA's structure was made, but also about the interplay that existed between many of the individuals who surrounded this discovery. Through Watson's eyes, you learned interesting qualities about the various characters in the drama.
 - o In our own lives, we sometimes realize that although we have one perspective on the world around us, our friends, family members, and

colleagues may have a completely different view of the same events that are taking place.

- In 500 to 800 words, write a coherent story from the perspective of one of the other characters with whom Watson interacts in the path to the discovery of the double-helical structure of DNA.
 - Your story must have some basis in the information presented in *The Double Helix*, but it must also give a different perspective from that of Watson. This will necessarily involve some speculation and artistic/poetic license on your part. That is, you will be making this up! It is historical fiction, based in fact from *The Double Helix* and plausible, but ultimately you are creating it.
 - You are not attempting to retell the entire *Double Helix* story in 1-2 pages, just a small piece of it.
3. [Homework assignment 3](#) is writing questions appropriate for an exam in MCB W61 and is due Week 4.
- Create multiple-choice and short-answer questions appropriate for use on MCB W61 exams. Write one multiple-choice question and one short-answer question for each of the three (3) topics that you will be given. That means you will write a total of six (6) questions, 3 of which are multiple-choice and 3 of which are short-answer. Be sure to clearly indicate the correct answer to your questions.
4. [Homework assignment 4](#) is a proposal for a research study and is due in Week 5.
- Your assignment is to propose a research study of a topic of interest related to the brain or mind. In order to do so, please investigate recent developments in an area that interests you by reading 3 related news media articles or articles from scientific journals. Since we want you to focus on topics of current interest, the articles you use cannot have been published before 2005. While reading the articles keep in mind new research possibilities and unanswered questions. You will utilize these ideas to propose a research study, and to write a short summary of your proposal. Your proposal should be 500 to 700 words in length

Detailed instructions for the homework will be provided on module pages and within those components.

Late assignments may not be accepted and will definitely not receive full credit.

The homework assignments are worth 8% of the final grade. However, you must turn in all four of the homework assignments and participate in all of the weekly discussion forums in order to receive better than a "C-" grade in the class.

Discussion Forums

Weekly Discussion Forums

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Each module contains a group discussion in which we ask you to write reflectively and critically about the discussion topic. Your posts and responses are considered your class participation and represent a unique opportunity for you to exchange views with your group-mates, share experiences and resources, and ensure your understanding of the course material.

Discussion groups have been pre-assigned and include other members of your GSI section. When you navigate to a discussion forum, you will automatically be taken to your group's instance of that discussion and to your group's space within the course. When finished with the discussion, you will need to navigate from your group space back to the main course space in order to continue participating in other aspects of the course.

While the Discussion Forum assignments are asynchronous (not real time), you will be expected to make an initial posting by 11:59 pm Thursday (PDT) and to respond to at least one other student's postings by 11:59 pm Sunday; continued participation throughout the remainder of the week is highly encouraged. See the instructions within each discussion forum for further guidelines.

Questions and Answers Forum

Please use this forum to post questions about the course or topics being studied. The questions will be answered in the forum by the course instructor or GSIs. This way, all students benefit from seeing the answers. This is the preferred place to ask and get answers to questions that are likely to be of general interest.

Midterm Exam

The midterm exam consists of 85 multiple-choice questions and will cover course material from Lectures 1-10 (first 2 and a half weeks) and *The Double Helix*. The midterm exam will be administered on the course website from **Thursday, June 11th, 8 am to Friday, June 12th, 8 am (PDT)**. The exam is closed book and notes; thus textbooks and notes should NOT be consulted. Nor should there be any communication with fellow students. The learning management system keeps detailed records of logins and submissions. Please review the ethics guideline for online courses provided at the beginning of this class and the UC Berkeley code of conduct.

Final Exam

The exam will be comprehensive and will cover course material from Lectures 1-22 and *The Double Helix*. The final exam will be proctored from **6-9 p.m., Wednesday, July 1st in 155 Dwinelle on the UC Berkeley Campus**. The exam is closed book and notes; thus textbooks and notes should NOT be consulted. If you are unable to make it onto campus for your final exam, you may have the option to take it under the supervision of a

proctor to receive credit for the course. Review the Proctor Info on the left navigation menu. Off-site proctor applications must be submitted prior to June 12, 2015.

Note the following requirements:

We will not change the days and times for these exams; mark your calendars now. There will be no make-up exams. If you miss an exam, you will receive zero points for that exam. In order to pass the class ("C-" or above) you must pass the final exam. Regardless of your scores on the midterms, a passing grade must be obtained on the final exam in order to pass the class. *If you miss taking the final or try to take it in a manner for which you have not received permission, you will fail this class automatically.*

Reminder: Your Course End Date

Your course will end on July 2nd. As you work through the course, please keep the end date in mind, and if you want to save any commentary or assignments for future reference, please make sure to print or copy/paste those materials before your access ends.

Grading

Your final course grade will be calculated as follows:

Category	Percentage of Grade
Homework Assignments	8%
Discussion Assignments	10%
Midterm Exam	23%
Final Exam	59%

Table 1: Final Grade Percentages

It will not be possible to get better than a "C-" grade in the class without turning in all four of the written homework assignments and participating in the discussion forums. If you are taking the course pass/ no pass, you must turn in all of the homework and participate in the discussion forums in order to pass the course.

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As stated previously, you must pass the final exam in order to obtain a "C-" grade or better in the class. Regardless of your score on the midterm, if you do not pass the final you will not pass the class.

The point ranges for the various letter grades will be determined at the end of the semester after all exams and other graded materials have been evaluated. In past years, it has generally been the case that 90% and above is the A-range and 80% and above is the B-range. The C, D, and F ranges are more variable and will depend on the range of scores that occur among the students this session.

Your letter grade in the course will be determined according to absolute standards of performance, which hopefully relate to your acquisition of knowledge and understanding of the material. You will not be competing against fellow students in the sense that we do not force letter grades to conform to a predetermined distribution. If everyone does extremely well, everyone could receive an "A" grade. If everyone does poorly (highly unlikely), then everyone could get a low grade. Rather than devoting energy to worrying about where grade cut-offs are, if you are truly interested in this subject and in getting the most from this class, we urge you to take the material seriously from the beginning, do the readings, and really make an effort to learn the material. Your efforts will be rewarded with deep knowledge and understanding of some truly fascinating topics. Good grades will be a side effect.

It is important to note that not all components are graded online and included in the online course grade book. Because of this, the online course grade book will not display your overall course grade at any given time or your final grade. It should simply be used to assess your performance on the components that are included within it: the discussions, written assignments and midterm exam. Your final letter grade will be mailed to you by the registrar's office.

Course Policies

Promptness

Homework assignments and discussion forum postings all have specific final due dates and times. You will not receive full credit if assignments are submitted after the indicated due date.

Further, each online activity must be submitted through the course website by the due date. Fax or mail submission will not be accepted. Students who wait until the final hours prior to a submission deadline risk having problems with their ISP, hardware, software, or various other site access difficulties. Therefore, it is advisable to submit assignments and tests through the course website early. The multiple days allowed for submission are to accommodate the busy schedules of working professionals, not to

accommodate procrastination. Students should plan accordingly and get into the habit of checking the course website several times each week, and submitting and posting early.

Honor Code

The student community at UC Berkeley has adopted the following Honor Code: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." The expectation is that you will adhere to this code.

Collaboration and Independence

Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, unless otherwise instructed, homework assignments and the online exam are to be completed independently and materials submitted as homework should be the result of one's own independent work.

Cheating

A good lifetime strategy is always to act in such a way that no one would ever imagine that you would even consider cheating. Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct. Exams are to be completed without the assistance of other people, and without reference to texts, notes, and other materials. The expectation is that you will be honest in the taking of exams.

Plagiarism

To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism and how to avoid it, explore the resources linked below:

[UC Berkeley Library Citation Page, Plagiarism Section](#)

[GSI Guide for Preventing Plagiarism](#)

Academic Integrity and Ethics

Cheating on exams and plagiarism are two common examples of dishonest, unethical behavior. Honesty and integrity are of great importance in all facets of life. They help to build a sense of self-confidence, and are key to building trust within relationships,

whether personal or professional. There is no tolerance for dishonesty in the academic world, for it undermines what we are dedicated to doing - furthering knowledge for the benefit of humanity.

Incomplete Course Grade

Students who have substantially completed the course but for serious extenuating circumstances, are unable to complete the final exam, may request an Incomplete grade. This request must be submitted in writing or by email to the GSI and course instructor. You must provide verifiable documentation for the seriousness of the extenuating circumstances. According to the policy of the college, Incomplete grades must be made up within the first three weeks of the next semester.

Students with Disabilities

Any students requiring course accommodations due to a physical, emotional, or learning disability must contact the [Disabled Students' Program \(DSP\)](#). They will review all requests on an individual basis.

- Request your Disabled Student Program Specialist to send the instructor a formal request before the official course start date by email
- In addition, notify the instructor and your Online Learning Support Specialist, which accommodations you would like to use.
 - Your Online Learning Support Specialist is Tracie Allen Littlejohn and her email is twgallen@berkeley.edu

End of Course Evaluation

Before your course end date, please take a few minutes to participate in our End of Course Evaluation to share your opinions about this course. The evaluation does not request any personal information, and your responses will remain strictly confidential. To access the evaluation, please select the "Course End Evaluation" link in the left navigation menu. The evaluation will be available starting on June 22, 2015. You may only take the evaluation once.