

MCB W61 –Brain, Mind and Behavior Syllabus 2014

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.

Course Credits

Three (3) semester credits.

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 immediate 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.

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Contact

Please use the course site for all correspondence with the Course Instructor and GSIs. You may post general questions to the Questions and Answers Forum or use the Inbox inside the course site to send a private email message.

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.

Please view [Office Hours](#), also accessible in the left nav menu, for more detailed information.

Textbook and Materials

An Introduction to Brain and Behavior by Brian Kolb and Ian Wishaw (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 Wishaw. 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.

Learning Activities

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 PowerPoint lecture presentations.
3. Read web-based announcements and postings assigned during the course.
4. Compose and post assigned responses to lectures and readings.
5. Complete midterm exam and final exam.
6. Complete writing assignments.

VERY IMPORTANT

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

[Academic Integrity Pledge](#)

Readings

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

Links to the PowerPoint lectures can be found within each weekly module. Note that for each narrated PowerPoint lecture, there is also a PDF handout. This supplement is available for printing and note taking.

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.**
 - 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 www.lib.berkeley.edu/instruct/guides/citations.html 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.
 - 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.
 - 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.

Discussions

Weekly Discussion Forums

Threaded discussions in this course reflect topics designed to promote critical thinking about the module under study.

Each week, one or two discussion questions will be assigned for an original posting to the discussion forum within each weekly module. That same week you are to continue the discussion with a written response to at least one colleague's posted discussion.

- Threaded discussions are asynchronous (not real time) discussions about a particular topic, discussion question, problem, or case study.
- The topic may include a posting deadline date for the discussion to conclude or adjourn.
- Participants can readily read all the previous postings in chronological order and make pertinent comments that add to the discussion, or ask questions for clarification.
 - They post new thoughts, opinions, literature review, perspectives, or questions about the issue under discussion.
 - The Instructor and/or GSIs will add reaction and summation comments.

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.

Examinations

Exams will consist of multiple-choice and short-answer questions. Both exams are closed book and notes; thus textbooks and notes should NOT be consulted during exams. Nor should there be any communication with fellow students. It is expected that students will abide by the UC Berkeley Student Code of Conduct and will demonstrate honesty and integrity while taking exams.

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 12th, 8 am to Friday, June 13th, 8 am (PST)**.

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 2nd in 155 Dwinelle on the UC Berkeley Campus**. 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](#) for more details. *In order to secure a proctored exam you will need to turn in the proctor application by June 13th.*

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.**

Reminder: Your Course End Date

Your course will end on July 3rd, 2014. 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 course grade will be calculated as follows:

Discussion Assignments	10%
Homework Assignments	8%
Midterm	23%
Final	59%

Grading Policy

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.

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.

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 final exam, may request an Incomplete grade. This request must be submitted in writing or by e-mail 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 \(DSP\)](#). Request your Disabled Student Program Specialist to send the instructor a formal request **before** the course start date by email.

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 19th. You may only take the evaluation once.

