

# **Course Information**

## **Course Number**

MCB W61

## **Course Name**

Brain, Mind, and Behavior

## **Course Instructor**

David Presti

## **Graduate Student Instructors (GSIs)**

TBA

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 course schedule. The GSIs will also facilitate ongoing discussion and interaction with you on major topics in each module.

## **Help & Support**

Click on the Support link, in the "START HERE: Course Information and Support" folder on the Modules page for details on getting help. You may want to print this page for quick reference. For tech help, you can contact the 24/7 Help Desk.

## **Office Hours**

The course instructors will set virtual office hours when students can communicate real time (synchronously). 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.

## Course Schedule

Please click on the **Course Schedule** link under the Modules tab page for an overview of due dates and projects. Use the **Calendar**, available from the Calendar tab page, to create your own class schedule and manage your coursework and assignments.

## Course Credits

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.

## Textbook and Materials

*An Introduction to Brain and Behavior* by Brian Kolb and Ian Whishaw (any edition: 4th edition, 2013, 3rd edition, 2009, **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 2013. If you have a copy of the 3rd edition (2009) 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. Go to the Modules page and click on the "START HERE" link. Click on the first link, "READ THIS", to learn about what constitutes cheating, plagiarism, and false information. If you think you already know, think again! You'll be surprised by what you find out. As a UC Berkeley student, you are expected to abide by these rules. Once you've read the agreement, click "AGREE TO THIS". Once you've clicked "OK", you gain access to the course.

## **Readings**

Read the assigned chapters for each weekly module. View the assigned multimedia presentations. The module's Key Concepts and multimedia lectures will provide an overview to assist you in focusing your study for assignments and exams. Readings and multimedia are listed in each respective Week folder. Specific reading assignments are listed on the Course Schedule and in the specific weekly modules.

## **Multimedia**

A list of PowerPoint lectures can be located on the Course Schedule and in the specific weekly modules. 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 course schedule 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](http://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 the website.

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.
  - Instructors will add reaction and summation comments from time to time.

### **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 instructors. 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.

### **Student Lounge**

The Student Lounge is the students' place for informal discussion, a place to create new topic threads and share common issues or experiences, class-related or not. The course

instructors will not check the Student Lounge or respond to questions here.

## **Examinations**

Exams will consist of multiple-choice and short-answer questions. The midterm exam covers the preceding portion of the course and draws from material in the lectures and *The Double Helix*. The final exam is comprehensive and covers material from the entire semester. The midterm exam will be administered online. There will be a designated 24-hour window of opportunity within which you may take the exam. The final exam will be administered in a proctored setting. Those students in the Berkeley area will take the exam on the UC Berkeley campus. For those individuals located at distant locations, individual proctoring arrangements will be made.

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 on TBA

**Final Exam** The final exam will be proctored from 6-9 p.m. Wednesday, July 2<sup>nd</sup>, 2014 in TBA. The exam will be comprehensive and will cover course material from Lectures 1-22 and *The Double Helix*.

*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. Students may possibly arrange to have the examination proctored if they cannot come to campus. Please contact your Program Coordinator at [summer\\_online\\_support@berkeley.edu](mailto:summer_online_support@berkeley.edu) to make alternative arrangements.



**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 access to the online classroom will expire on the course End Date. 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 Assignmmets	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/not-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 scores on the first two midterms, 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.

## **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 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, see, for example: <http://www.lib.berkeley.edu/instruct/guides/citations.html#Plagiarism> <http://gsi.berkeley.edu/teachingguide/misconduct/prevent-plag.html>

## **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), <http://dsp.berkeley.edu/services.html>, at the beginning of the course with their request. The DSP will review all requests on an individual basis.

## **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 follow the link near the bottom of the Modules tab page. You may only take the evaluation once.