

Instructor/TA Info

Instructor Information

Name: Kristin Hansen

Office Location: CPSE- Rm 341

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Office Hours: Tue, Thu 7:00pm-7:30pm

Or By Appointment

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Course Information

Description

Students will be given an overview of the field of Behavioral Neuroscience. They will learn about its history, research in the field and applications, the basic functioning and structure of the nervous system, the interaction between various parts of the nervous system and the body and related behavioral manifestations.

Spiritual/religious and philosophical considerations of a neurophysiological foundation for behavior will be interwoven throughout the course. Students will explore the underlying neurophysiology and pathology related to the senses, movement, sleep, reproduction, emotion, ingestion, learning and memory. They will also learn about the neurophysiology involved in communication, neurological, psychiatric, substance abuse and trauma-related disorders. They will study whole-brain parenting/teaching. The course will be geared towards students training to work in teaching and educational settings.

Materials

Item	Price (new)	Price (used)
 <p><u>WHOLE-BRAIN CHILD (P) - Required</u> by SIEGEL</p>	17.00	12.75
 <p><u>No-Drama Discipline - Required</u> by Siegel</p>	17.00	12.75
 <p><u>Physiology of Behavior, global edition, 12e - Required</u> by Carlson</p>		

Learning Outcomes

Basic principles of neuroanatomy and neurophysiology

1. Discuss basic principles of neuroanatomy and neurophysiology.

Way in which different psychotropic agents modify behavior

3. Compare and contrast the way in which different psychotropic agents modify behavior by altering neurotransmitter systems.

Drug classification

4. Describe drug classification and which drugs are used to treat different disorders.

Psychobiology of drug abuse

5. Be familiar with the psychobiology of drug abuse, classes of abused drugs, and drug abuse treatment alternatives.

Neurologic impairment

6. Be familiar with various forms of neurologic impairment and accompanying behavioral manifestations.

Grading Scale

Grades	Percent
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
E	0%

Grading Policy

Grades for all assignments will be recorded in Gradebook. It is the students' responsibility to monitor their grades on Gradebook and to notify the instructor of any missing or incorrect grade. Any missing or incorrect grades from the midterm or final exam or from work turned in on the day of the final exam or before must be brought to the attention of the instructor by the day before the date that final grades are due to the registrar's office. Requests to fill in missing grades or to alter incorrect grades will not be accepted after this deadline.

Finally, any missing or incorrect grades brought to the instructor's attention must be backed up by evidence of the correct grade and that the work was turned in on time.

Participation Policy

This will constitute 10% of the students' grades. In order to have engaging discussions about the course material, students will need to come prepared for class having read the assigned readings. Rather than having weekly quizzes, class participation will be used to evaluate whether the student has completed the assigned reading material. I will make every effort to make sure students each have an opportunity to participate. If you have any concerns about class participation, please speak with me after the first class. Absences excused by the instructor will not be counted against his or her class participation grade.

Attendance Policy

Students are expected to attend all classes except for emergencies and absences excused by the instructor. If they cannot attend a class, they should let the instructor know and find out how to make up what was missed in the class.

Classroom Procedures

Please be respectful in our classroom. Please turn off cell phones while in class. Computers are welcome for

contributions are important.

Assignments

Assignment Descriptions

Student Presentations

May
14

Due: Tuesday, May 14 at 4:00 pm

(Worth **25%** of students' grade) Each student will choose a disorder that has an underlying neurophysiological etiology with behavioral manifestations in problems focused mainly in one of the following areas: visual, auditory, body and chemical senses, sleep, movement, reproduction, emotion, ingestion, learning and memory. In a **20-minute** power-point presentation to the class, they will be expected to cover with those in their group a portion of the Carlson and Birkett (12th Edition) chapter devoted to their area. They will also be asked to describe the underlying physiological mechanisms in both healthy individuals and in those with their chosen disorder and any known treatments. Students will be expected to research their disorder using multiple sources including peer reviewed journal articles. Their research should extend beyond what is covered in the text. Sources must be cited. Students should include some interesting clinical examples and they can use video content (up to 2-3 minutes) if so desired. They must demonstrate an understanding of what can be known about their topic based on an understanding of behavioral neuroscience and its limitations for understanding the brain/mind. Disorders of focus must be preapproved by the instructor by **May 7th**.

Midterm Exam

May
23

Due: Thursday, May 23 at 4:00 pm

There will be a multiple-choice **midterm exam** (worth **20%** of their grade) covering the material found in chapters 1-4 of the text.

Student Research Paper

Jun
13

Due: Thursday, Jun 13 at 4:00 pm

(Worth **20%** of students' grade) Students will be expected to write up a short research proposal 5-8 pages proposing a study based on their disorder that has the potential to advance understanding in the field of behavioral neuroscience. The study should provide a very brief literature review that can summarize the findings from the students' previous presentation, the proposed idea, hypotheses, proposed methods, expected outcomes and potential future directions. It is recommended that students work on their project in conjunction with preparing their presentation.

Student Participation

Jun
13

Due: Thursday, Jun 13 at 11:59 pm

Final Exam

Jun

Due: Thursday, Jun 20 at 6:50 pm

text, the two assigned parenting books and class lectures on chapters 14-17 of the text, the parenting books and the lecture on trauma and parenting. It will include multiple-choice questions and two essay questions. Students must be prepared to be in town for the final exam. It cannot be taken at another time unless special permission is granted by the professor for exceptional reasons.

University Policies

Honor Code

In keeping with the principles of the BYU Honor Code, students are expected to be honest in all of their academic work. Academic honesty means, most fundamentally, that any work you present as your own must in fact be your own work and not that of another. Violations of this principle may result in a failing grade in the course and additional disciplinary action by the university. Students are also expected to adhere to the Dress and Grooming Standards. Adherence demonstrates respect for yourself and others and ensures an effective learning and working environment. It is the university's expectation, and every instructor's expectation in class, that each student will abide by all Honor Code standards. Please call the Honor Code Office at 422-2847 if you have questions about those standards.

Preventing Sexual Misconduct

In accordance with Title IX of the Education Amendments of 1972, Brigham Young University prohibits unlawful sex discrimination against any participant in its education programs or activities. The university also prohibits sexual harassment-including sexual violence-committed by or against students, university employees, and visitors to campus. As outlined in university policy, sexual harassment, dating violence, domestic violence, sexual assault, and stalking are considered forms of "Sexual Misconduct" prohibited by the university.

University policy requires all university employees in a teaching, managerial, or supervisory role to report all incidents of Sexual Misconduct that come to their attention in any way, including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Incidents of Sexual Misconduct should be reported to the Title IX Coordinator at t9coordinator@byu.edu or (801) 422-8692. Reports may also be submitted through EthicsPoint at <https://titleix.byu.edu/report> (<https://titleix.byu.edu/report>) or 1-888-238-1062 (24-hours a day).

BYU offers confidential resources for those affected by Sexual Misconduct, including the university's Victim Advocate, as well as a number of non-confidential resources and services that may be helpful. Additional information about Title IX, the university's Sexual Misconduct Policy, reporting requirements, and resources can be found at <http://titleix.byu.edu> (<http://titleix.byu.edu>) or by contacting the university's Title IX Coordinator.

Student Disability

Brigham Young University is committed to providing a working and learning atmosphere that reasonably accommodates qualified persons with disabilities. If you have any disability which may impair your ability to complete this course successfully, please contact the University Accessibility Center (UAC), 2170 WSC or 422-2767. Reasonable academic accommodations are reviewed for all students who have qualified, documented disabilities. The UAC can also assess students for learning, attention, and emotional concerns. Services are coordinated with the student and instructor by the UAC. If you need assistance or if you feel you have been unlawfully discriminated against on the basis of disability, you may seek resolution through established grievance policy and procedures by contacting the Equal Employment Office at 422-5895, D-285 ASB.

Academic Honesty

The first injunction of the Honor Code is the call to "be honest." Students come to the university not only to improve their minds, gain knowledge, and develop skills that will assist them in their life's work, but also to build character. "President David O. McKay taught that character is the highest aim of education" (The Aims of a BYU Education, p.6). It is the purpose of the BYU Academic Honesty Policy to assist in fulfilling that aim. BYU students should seek to be totally honest in their dealings with others. They should complete their own work and be evaluated based upon that work. They should avoid academic dishonesty and misconduct in all its

Inappropriate Use Of Course Materials

All course materials (e.g., outlines, handouts, syllabi, exams, quizzes, PowerPoint presentations, lectures, audio and video recordings, etc.) are proprietary. Students are prohibited from posting or selling any such course materials without the express written permission of the professor teaching this course. To do so is a violation of the Brigham Young University Honor Code.

Mental Health Concerns

Mental health concerns and stressful life events can affect students' academic performance and quality of life. BYU Counseling and Psychological Services (CAPS, 1500 WSC, 801-422-3035, caps.byu.edu) provides individual, couples, and group counseling, as well as stress management services. These services are confidential and are provided by the university at no cost for full-time students. For general information please visit <https://caps.byu.edu> (<https://caps.byu.edu>); for more immediate concerns please visit <http://help.byu.edu> (<http://help.byu.edu>).

Plagiarism

Intentional plagiarism is a form of intellectual theft that violates widely recognized principles of academic integrity as well as the Honor Code. Such plagiarism may subject the student to appropriate disciplinary action administered through the university Honor Code Office, in addition to academic sanctions that may be applied by an instructor. Inadvertent plagiarism, which may not be a violation of the Honor Code, is nevertheless a form of intellectual carelessness that is unacceptable in the academic community. Plagiarism of any kind is completely contrary to the established practices of higher education where all members of the university are expected to acknowledge the original intellectual work of others that is included in their own work. In some cases, plagiarism may also involve violations of copyright law. Intentional Plagiarism-Intentional plagiarism is the deliberate act of representing the words, ideas, or data of another as one's own without providing proper attribution to the author through quotation, reference, or footnote. Inadvertent Plagiarism-Inadvertent plagiarism involves the inappropriate, but non-deliberate, use of another's words, ideas, or data without proper attribution. Inadvertent plagiarism usually results from an ignorant failure to follow established rules for documenting sources or from simply not being sufficiently careful in research and writing. Although not a violation of the Honor Code, inadvertent plagiarism is a form of academic misconduct for which an instructor can impose appropriate academic sanctions. Students who are in doubt as to whether they are providing proper attribution have the responsibility to consult with their instructor and obtain guidance. Examples of plagiarism include: Direct Plagiarism-The verbatim copying of an original source without acknowledging the source. Paraphrased Plagiarism-The paraphrasing, without acknowledgement, of ideas from another that the reader might mistake for the author's own. Plagiarism Mosaic-The borrowing of words, ideas, or data from an original source and blending this original material with one's own without acknowledging the source. Insufficient Acknowledgement-The partial or incomplete attribution of words, ideas, or data from an original source. Plagiarism may occur with respect to unpublished as well as published material. Copying another student's work and submitting it as one's own individual work without proper attribution is a serious form of plagiarism.

Respectful Environment

"Sadly, from time to time, we do hear reports of those who are at best insensitive and at worst insulting in their comments to and about others... We hear derogatory and sometimes even defamatory comments about those with different political, athletic, or ethnic views or experiences. Such behavior is completely out of place at BYU, and I enlist the aid of all to monitor carefully and, if necessary, correct any such that might occur here, however inadvertent or unintentional. "I worry particularly about demeaning comments made about the career or major choices of women or men either directly or about members of the BYU community generally. We must remember that personal agency is a fundamental principle and that none of us has the right or option to criticize the lawful choices of another." President Cecil O. Samuelson, Annual University Conference, August 24, 2010 "Occasionally, we ... hear reports that our female faculty feel disrespected, especially by students, for choosing to work at BYU, even though each one has been approved by the BYU Board of Trustees. Brothers and sisters, these things ought not to be. Not here. Not at a university that shares a constitution with the School of the Prophets." Vice President John S. Tanner, Annual University Conference, August 24, 2010

Date	Column 1	Column 2
Week 1		
T Apr 30 Tuesday	Introduction: History of Behavioral Neuroscience/ Introduction to the Nervous System	Carlson & Birkett Chapter 1 Presidential Commission for the Study of Bioethical Issues, 2016
Th May 02 Thursday	Structure of the Nervous and Endocrine System/ Neural Communication	Carlson & Birkett Chapters 2 & 3
Week 2		
T May 07 Tuesday	Psychopharmacology/ Guest speaker	Carlson & Birkett Chapter 4, Hess, J. Z., Gantt, E.E., Lacasse, J.R., & Vierling-Claassen, N. (2014). <u>Narrating the Brain: Investigating Contrasting Portrayals of the Embodiment of Mental Disorder</u> . <i>Journal of Phenomenological Psychology</i> , 45 (2) 168–208.
Th May 09 Thursday	Integrating the brain and implications for therapy, parenting and classrooms/ Research Methods/Guest Speaker	No Drama Parenting (Siegal & Bryson) The Whole-Brain Child (Siegal & Bryson)
Week 3		
T May 14 Tuesday	Vision & Audition	Carlson & Birkett, Chapters 6 & 7, student presentations
Th May 16 Thursday	The Body and the Chemical Senses, Substance Abuse & Movement	Carlson & Birkett, Chapters 7, 9 and 18, student presentations
Week 4		
T May 21 Tuesday	Sleep and Wakefulness/Ingestion/Midterm review	Carlson & Birkett, Chapters 9 & 12, student presentations
Th May 23 Thursday	Midterm/ Emotion/Learning and Memory	Carlson & Birkett, Chapters 11 & 13 student presentations
Week 5		
M May 27 Monday	Memorial Day	

T May 28 Tuesday	Reproduction/ Mindfulness	Carlson & Birkett, Chapter 10, student presentations Hansen, Kristin L.; Nielsen, Dianne; and Harris, Mitchell (2008) "Meditation, Christian Values and Psychotherapy," <i>Issues in Religion and Psychotherapy</i> : Vol. 32 : No. 1 , Article 5. Available at: https://scholarsarchive.byu.edu/irp/vol32/iss1/5
Th May 30 Thursday	Movie/ Neurological Disorders	Carlson & Birkett, Chapters 15
Week 6		
T Jun 04 Tuesday	Stress, Anxiety & Neurodevelopmental Disorders, Guest	Carlson & Birkett, Chapter 17
Th Jun 06 Thursday	Human Communication/Guest Speaker (Speech & Language Pathologist)	Carlson & Birkett, Chapter 14
Week 7		
T Jun 11 Tuesday	Schizophrenia & Affective Disorders, Guest	Carlson & Birkett, Chapters 16
Th Jun 13 Thursday	Trauma/ Excerpts from The Body Keeps Score (van der Kolk)/ Wrap up/ Exam Review Student Participation	Papers Due
Week 8		
T Jun 18 Tuesday	Spring Exam Preparation (06/18/2019 - 06/18/2019)	
W Jun 19 Wednesday	First Day of Spring Final Exams (06/19/2019 - 06/20/2019)	
Th Jun 20 Thursday	Final Exam: 341 MCKB 5:00pm - 6:50pm Final Exam	