



SW226-60 Biological Basis of Behavior

Term: Spring 2023

3 Semester Hours

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Social Work Program Mission Statement

The mission of the Social Work program at Lewis-Clark State College is to prepare students for entry-level generalist practice within their chosen community. Our program is dedicated to meeting students’ needs by providing in-person and online delivery options to promote success for all students. We are committed to the preparation of professional Social Workers by enhancing cognitive and affective processes, and instilling knowledge, skills, and values to serve the needs of individuals, families, groups, communities, and organizations.

The Program relies on a liberal arts foundation and draws on person-in-environment and strengths-based perspectives. Through courses, internships, and student service activities the program prepares graduates to:

- Provide competent services to promote social and economic justice and advocate for human rights.
- Acknowledge the importance of human relationships and value the dignity and worth of the person.
- Practice respectfully with diverse populations, understanding the importance of enhancing the quality of life for all persons, locally and globally.
- Practice from a set of ethical principles inherent to the Social Work profession, including the recognition that professional development is a life-long learning process.
- Practice with integrity as professional Social Workers.
- Engage in meaningful scientific inquiry and program evaluation.

(Revised February 2022)

Course Description

This course is designed to introduce students to a field of neuroscience that is variously referred to as physiological psychology, biopsychology, behavioral biology, or behavioral neuroscience. The main focus is on gaining and/or demonstrating an understanding of the relationships between the central nervous system processes and human behavior.

Purpose of the course in the Program

Traditional schools of social work and psychology (i.e. psychodynamic, behaviorism, and social learning theories) directed very little attention to the connection between human behavior and neurological processes. Since the late 1980's in conjunction with advancements in neuropsychology, electrophysiology, and neuroimaging technologies, research has expanded dramatically demonstrating the connection between neuroanatomy, normative human behavior patterns, and social dysfunction. The purpose of this course in the psychology and social work curriculum is to provide a fundamental understanding of the biological processes and the impact of these processes on human behavior within the context of the social environment.

EPAS competencies and core objectives

The Council on Social Work Education sets educational standards for all accredited social work programs. The 2015 Educational and Policy Accreditation Standards (EPAS) established 9 Core Competencies that social work students are expected to meet upon graduation from an accredited BSW Program. As a result of the focus on competency-based education, the faculty has identified within the LCSC curriculum where the Core Competencies and Practice Behaviors are addressed and measured. In senior seminar, during the course of the full year, students will demonstrate an understanding of each of the core competencies as outlined below. Please note that the Practice Behaviors are linked to the Course Objectives and Assignments.

- ◆ Competency 1: Demonstrate Ethical and Professional Behavior. Social Workers:
 - make ethical decisions by applying the standards of the NASW Code of Ethics, relevant laws and regulations, models for ethical decision-making, ethical conduct of research, and additional codes of ethics as appropriate to context (1.1);
 - use reflections and self-regulation to manage personal values and maintain professionalism in practice situations (1.2).
- ◆ Competency 2: Engage Diversity and Difference in practice. Social Workers:
 - apply and communicate understanding of the importance of diversity and difference in shaping life experiences in practice at the micro, mezzo, and macro levels (2.1);
 - apply self-awareness and self-regulation to manage the influence of personal biases and values in working with diverse clients and constituencies (2.3).

Competency 4: Engage in Practice-informed Research and Research-informed Practice.
Social workers:

- apply critical thinking to engage in analysis of quantitative and qualitative research methods and research findings (4.2); and

- use and translate research evidence to inform and improve practice, policy, and service delivery (4.3).

Course Objectives

The purpose of this course is to prepare the student for trauma-informed practice with individuals, groups and communities. During this course, you will:

- Identify the basic structures and functions of the human nervous system and their impact on human behavior and social function. Competency 4
- Demonstrate key stages of brain development and the normative developmental changes that occur at each developmental stage. Competency 4
- Identify the impact of basic pharmacology on the functions of the nervous system. Competency 4
- Demonstrate understanding of the various parts of the cerebrum/lower brain and their influences on language, vision, and motor control. Competency 4
- Demonstrate knowledge of the interaction of the nervous system in emotional regulation, learning, and memory. Competency 4
- Identify the processes and functions of sleep and its impact on social functioning. Competency 4
- Discuss the function of hormones in sexual development and human behavior and consider the ethical implications of current social constructs of gender, sex, sexual orientation. Competencies 1 and 4
- Demonstrate knowledge regarding the role of biological processes in psychopathology, social dysfunction, and traumatic brain injury and the ethical and social implications in societal beliefs about mental health and mental illness. Competencies 1 and 4
- Discuss the ethical considerations of acquiring and maintaining knowledge of the biological processes affecting human behavior in order to enhance the assessment and interventions social work can offer. Competency 1.

Texts and Required Reading

Breedlove, M. S., and Watson, N.V., (2021) *The minds' machine: Foundations of brain and behavior.*, Contemporary Books.

American Psychological Association. (2021). *Publication manual of the American Psychological Association.* (7th ed.). Washington, D.C.: APA.

And other readings as assigned on Canvas.

Teaching methods/Class climate

This course is a learning process utilizing readings, research and video viewings to be analyzed in personal journal responses, course quizzes and research papers.

There will be times during this course when societal “isms” or prejudicial attitudes and discriminatory practices are examined. Because of our commitment to social and economic justice, we are open to hearing all views and all perspectives will be carefully examined. Students are expected to be respectful of the opinions of others while at the same time striving to attain the ideals of social justice.

Grade Rubric

90-100 % – Your work shows that you have thoroughly studied the material. You have supported your arguments with a learned material, as well as your own thoughts. The work shows originality and inventiveness in that you are able to take two or more sources and create your own suppositions. You have not only met the basic requirements of the assignment, but have pushed yourself to go beyond the “requirements.” You demonstrate a desire to research further into the assigned topics.

The organization of your writing is clear and your use of sentence structure enhances the reader’s understanding of the points you are making. Your writing encourages the reader to continue reading. It is without grammatical error and has only a few typographical errors. Your work clearly rises above that of the typical senior in social work. You show that you are able to soon handle graduate level work and that your writing as a social worker will be concise, relevant and of benefit to your clients.

B 80-89% – Your work meets all of the minimal requirements of the assignment. You show that you have the necessary knowledge of a competent social worker. You are able to use outside sources and your own opinions to generate arguments. You have room for growth in your professional writing skills; and have room for growth in terms of developing your own arguments and philosophy of social work.

Your writing has few grammatical errors and/or awkward sentences and is consistent with competent writing in the social work field. You are doing work expected of a senior in a social work program and your writing will be competent in the field of social work. You may still benefit from working on your writing skills if you want to do grant writing work, or administrative work.

C 70-79% – Your material shows that you have not fully understood the material (or just didn’t read it.) You are able to write about the main tenets of social work, but do not bring in thoughts or your own, and/or you have not met some of the basic requirements of the assignment.

Your writing has errors of grammar and mechanics and the sentence structure is sometimes difficult to understand. You are not doing work that is typical of a senior in a social work program and would find working as a social worker difficult. You will need to work closely with the instructor to improve your work and may need to take your writing to the writing lab.

Grades less than 80% may be rewritten for a grade no higher than 80%.

D 60 – 69% – You have not met the requirements of the assignment and/or have not demonstrated writing skills required for the level of this course. Papers that receive a D may be rewritten for a grade of no higher than 80%.

Assignment	Points
Discussion Board 1	25 points
Build a Brain	75 points
Quizzes (3 at 100 points each)	300
Research Annotated bibliography (first paper)	50 points
Journals (6 at 50 points each)	300 points
Paper I	100 points
Paper II	100 points
Sleep study	50 points
Total possible points	1000 points

Grading Scale

A 93-100%

A minus 90 to 93%

B plus 87 – 89%

B 83 – 86%

B minus 80 – 82%

C plus 77 – 79%

C 73 – 76%

C minus 70 – 72%

D 60 – 69%

F below 60

Students in the Social Work Program will need to earn a grade of at least C.

Academic Honesty and Plagiarism

Part of the mission of Lewis-Clark State College is to educate students to be ethical. Students share with the faculty the responsibility for academic honesty and integrity. The college expects its students to do their own academic work. In addition, it expects active participation and equitable contributions of students involved in group assignments. Violation of the Academic Integrity Statement, in whole or part, could result in an “F” grade for the course. The following acts of academic dishonesty are not acceptable:

- Cheating: using or attempting to use unauthorized materials, information, or study aids in any academic exercise (e.g., an exam).

- Fabrication: unauthorized falsification or invention of any information or citation in an academic exercise (e.g., a paper reference).
- Plagiarism: representing the words or ideas of another as one's own in any academic exercise (e.g., failing to cite references appropriately or taking verbatim from another source).
- Facilitating academic dishonesty: helping or attempting to help another to commit academic dishonesty (e.g., allowing another to copy from your test or use your work).

In addition to action by the professor, all incidents may be reported to Student Affairs.

Professional Writing Standards

All printed work submitted to this professor should be prepared at a college standard of professional editing in accordance with the Publication Manual of the American Psychological Association (6th Ed.). Therefore, allow sufficient preparation time for proofreading and correction to typos, misspellings, and grammatical errors.

The reason for this expectation is that professionals are often judged based upon the quality of their written work. Carelessness in spelling and editing suggests that there will also be mistakes in the substance of the work. Therefore, written work, which has misspellings and other editing problems, will be graded down on this basis alone.

Note: If you need help with your writing skills, the Writing Center (792-2433) may be able to assist you in improving them. The efforts you make will help you with your courses at LCSC as well as throughout your professional career because you will continue to be judged by other professionals on the basis of your written work.

The instructor reserves the right to waive one or more of the policies listed above in rare, but special circumstances.

Tentative Schedule

Week	Due Date	Activity	Assignments due
Week 1	Jan. 22	Chapter 1 – Structure and function	Introduction Disc Post
Week 2	Jan. 29	Chapter 2 - Neurophysiology	Build a Brain
Week 3	Feb. 5	Chapter 3 – chemistry of behavior, drugs, addiction reward	Journal 1
Week 4	Feb. 12	Trauma and the Brain	Quiz 1
Week 5	Feb. 19	Trauma and the Brain	Annotated Bibliography
Week 6	Feb. 26	CH 5 Pain	Journal 2
Week 7	March 5	CH 8 The Biology of Sex and Gender	Journal 3

Week 8	March 12	CH 9 homeostasis	Paper 1 due
Week 9	March 19	CH 10 biological rhythms and sleep	Journal 4
Week 10	March 26	CH 11 Emotions aggression and stress	Sleep study
Spring Break			
Week 11	April 9	Ch 12 Mental Health	Quiz 2
Week 12	April 16	CH 13 Memory and learning	Journal 5
Week 13	April 23	CH 14 Attention and higher cognition	Paper 2
Week 14	April 30	CH 15 Language and Lateralization	Quiz 3
Week 15	May 7		Journal 6
Week 16		There is no final for this class	

Descriptive Material Regarding Assignments

Introductory Discussion Board (25 points)

You will participate in an on-line discussion post with your class mates during the first week of the semester. You will be given a prompt for the discussion on Canvas.

Build a Brain or Neuron (75 points)

You will create a 3D version of the brain or a neuron with your materials of choice. You will upload a photo of the model with a brief discussion of your work in a Discussion Board format.

Journals (6 journals – 50 points each, total 300)

You will write a journal entry six times during the semester. Each journal should be 3 - 4 pages for the body of the paper. You do not need a cover page for the journals, but make sure that you have included your name on the journal's first page. Journal prompts can be found on Canvas.

Paper I, Neurological Condition: The Scientific View (150 points)

This assignment earns you points for 2 separate submissions – 75 points for an annotated bibliography and 100 points for the final research paper.

You will develop your thesis on a brain disorder of your choice. You will describe the disorder from a scientific perspective. Please see Canvas for a full description.

Paper 2, Neurological Condition: The Lived Experience (100 points)

You will develop your thesis on a brain disorder of your choice, but one which is different from that in your first paper. In this paper you will focus specifically on the emotional aspects for those living with the disorder. Please see Canvas for a full description.

Quizzes (3) 100 points each (300 points total)

There will be 3 quizzes during the semester focusing on the recent readings and content material. The quizzes are open book. The questions are essay style questions. You will be provided with a study guide prior to the quizzes to help you prepare the possible questions.

Sleep Study (50 points)

You will complete a sleep journal for yourself for one week. You will then analyze your own sleep patterns and the conditions that may affect your sleep and create a suggested plan for improving sleep. This will be based on your knowledge of sleep gained from the readings and content material. You will submit both your sleep log and written analysis.

Final Exam Policy

There will be no final exam.