

COURSE ADDITION/REVISION/TERMINATION FORM

(See back of form for instructions)

ADDITION ___ REVISION ___ TERMINATION ___

1. COURSE NUMBER _____ 2. COURSE TITLE _____

3. IF REVISION: Previous Course No. _____ Previous Title _____

4. FOR ADDITIONS AND REVISIONS -
FIRST TERM/YEAR TO BE OFFERED:

Fall ___ Spring ___ Summer ___ Term _____

5. FOR TERMINATIONS ONLY -
LAST TERM/YEAR TO BE OFFERED:

Fall ___ Spring ___ Summer ___ Term _____

6. COLLEGE:

DEPARTMENT NAME:

7. CIP CODE: _____

8. FIXED CREDIT HOURS: YES ___ NO ___

___ Total Hours

___ Lec Hours

___ Lab Hours

9. VARIABLE CREDIT HOURS: YES ___ NO ___

___ Total Min Hours ___ Max Total Hours

___ Min Lec Hours ___ Max Lec Hours

___ Min Lab Hours ___ Max Lab Hours

10. REPEATABLE COURSE TAKEN FOR CREDIT: YES ___ NO ___ If YES, total number of times course can be taken _____

11. COURSE LEVEL:

12. GRADE TYPE:

13. COURSE DEGREE RELATED: Degree related ___ Developmental ___

14. COURSE MEDIUM-Choose appropriate code:

15. FACULTY CREDIT HOURS: ___

16. CROSS-LISTED COURSE: NO ___ YES ___ WITH _____

17. SPECIAL COURSE FEE? (Must be Board approved)

YES ___ Amount \$ _____ NO ___

18. UNIVERSITY STUDIES COURSE:

19. Course Description (20 words or less) for University BULLETIN or Attach Electronic Syllabus:

COURSE APPROVAL SIGNATURES

Department Chairperson

Dean of Kent Library

College Council

College of Education Council

University Studies Council

Graduate Council

To obtain the next signature, save the pdf to your desktop and then email the form as an attachment to the next individual for signing.
When submitting the form, the **email must come from your Southeast email account.**

Registrar's Office Use Only

SCACRSE _____ Bulletin _____ Degree Audit _____ SHATATR _____

Instructions for Proposing a New or Revised Course

1. Attach a statement explaining and justifying the course addition/revision/termination request. Why is this action necessary and how does it benefit students?
2. Since library resources are crucial to successful instruction, new course and course revision proposals must request an assessment of available and needed library holdings and resources. A memo from the Library Dean providing this assessment must be attached.
3. If proposed course change impacts existing programs offered through other departments in any way (i.e. enrollment, duplication, etc.), a memo from all affected departments stating issues were discussed and resolved must be attached to the proposal.
4. The proposal packet is required to be completed prior to consideration by the appropriate College Council.

Instructions for Completing Course Addition/Revision/Termination Form

1. Course Number: Two letters (discipline) and three numbers (i.e., EN 140).
2. Course Title: Full name of course.
3. If Revision: Indicate previous course number and/or title if change has been made. A new course number must be used if the revised course is not equivalent to the previous course offered.
4. For Additions and Revisions-First Semester/Year To Be Offered: Indicate first semester/year course is to be offered.
5. For Terminations Only-Last Semester/Year To Be Offered: Indicate last semester/year course is to be offered.
6. College/Department Name: Please choose the College and Department Name.
7. CIP Code: Enter six digit code number. Contact Institutional Research for information.
8. Fixed Credit Hours: Fill in total credit hours. If course is lecture only, the lecture hours are the same as total hours and lab hours are left blank. For lab courses, fill in actual credit hours for lecture and lab. Do not use contact hours for lab hours.
9. Variable Credit Hours: Indicate total minimum hours and total maximum hours for which credit can be received. Indicate minimum and maximum lecture and lab hours as appropriate.
10. Repeatable Course for Credit: Indicate if students will be allowed to enroll in this course more than once without having it counted as a repeated course. NOTE: If the course allows for multiple repeats, it is outside the normal repeat procedure. If a student making a grade of 'D' or 'F' wants to repeat the course for a better grade, special handling is required.
11. Course Level: Choose appropriate course level.
12. Grade Type: Indicate if course is standard grade (A, B, C, etc.) or Credit/No Credit
13. Course Degree Related: Indicate if course is to be offered for degree credit or developmental credit.
14. Course Medium: Choose appropriate type of course. For fee purposes this is most important for workshop and KSAM courses.
15. Faculty Credit Hours: Faculty Credit Hours are the same as credit hours for the course.
16. Cross-listed Course: List course that is cross-listed across disciplines (e.g., PY120/CF120)
17. Special Course Fee: Indicate course fee amount as approved by Board of Regents
18. University Studies Course: Choose NO, EN100, First Year Introductory Course, or the category in which the course falls.
19. Course Description for University BULLETIN: Attach electronic syllabus for new or revised courses or type course description as it will appear in University BULLETIN. Description is limited to 20 words.

COURSE APPROVAL DOCUMENT
Southeast Missouri State University

Department: Communication Disorders

Course No. CD 629

Title of Course: Neuroscience of Communication Disorders

Date: 2-17-17

Please check: New

Revision

Catalog Description (Credit Hours of Course): An advanced study of central and peripheral nervous systems, with emphasis on neural mechanisms explaining speech, language, cognition, and swallowing. (2 credit hours)

I. Co- or Prerequisite(s): graduate standing

II. Purposes or Objectives of the Course (optional):

1. Use appropriate terminology related to the study of neuroanatomy and neurophysiology, including terms that relate to various neurological conditions
2. Identify key structures and functions of the central, peripheral, and autonomic nervous systems.
3. Describe the basic development of the nervous system.
4. Describe the major components of the cerebrovascular system.
5. Describe the parts of a neuron, as well as the basic neurophysiology of how neurons conduct electrical and chemical signaling within the nervous system.
6. Differentiate between the following in terms of function and impairment: upper motor neurons, lower motor neurons, corticobulbar tract, corticospinal tract.
7. Describe the basic components of the sensorimotor system, including the basal ganglia, cerebellum, thalamus, primary and association cortices, and ascending and descending pathways.
8. Perform a basic cranial nerve exam for speech and swallowing functions.
9. Identify the basic neural components of the visual and auditory pathways.
10. Describe the major neural components that contribute to speech motor control and how damage to these contributes to motor speech disorders.
11. Identify the major language areas of the brain and describe how patterns of damage that contribute to the various manifestations of cognitive and language disorders.
12. Define higher order functions of the brain and explain how deficits manifest in patients.
13. Understand the basic findings from a neurological and neuropsychological examination.
14. Define neuroplasticity and relate how the basic principles of neuroplasticity apply to rehabilitation and brain function.

III. Student Learning Outcomes (Minimum of 3):

- A. The student will be able to integrate the principles of neuroscience into understanding the etiology, signs, and symptoms of motor speech disorders.
- B. The student will be able to integrate the principles of neuroscience into understanding the etiology, signs, and symptoms of neurogenic swallowing disorders.
- C. The student will be able to integrate the principles of neuroscience into understanding the characteristics of cognitive and neurogenic language disorders.

IV. Optional departmental/college requirements:

- A.
- B.

V. Course Content or Outline (Indicate number of class hours per unit or section):

<u>Modules</u>	<u>No. of Class Hours</u>
1. An Overview of Essential Neurological Concepts and Principles	2
-Divisions of the nervous system -Functional localization in the brain -Cortical and subcortical functions -Principles governing the human brain (e.g., laterality, neuroplasticity)	
2. Development of the Nervous System	3
-Cell division -Genetic inheritance -Clinical correlates	
3. Anatomy of the Brain	6
-Brainstem -Basal nuclei -Thalamus and associated structures -The limbic pathways -Cerebellum -Meninges -Ventricles -Blood supply Vascular network Cerebral blood flow -Clinical correlates	
4. Anatomy of the Spinal Cord	2
-Motor nuclei and innervations -Sensory and motor tracts -Reflexes -Clinical correlates	
5. Cranial and Spinal Nerves	4
-Cranial nerve nuclei and pathways -Autonomic Nervous System -Clinical correlates	

6. Sensory Pathways	3
<ul style="list-style-type: none"> -Head and face -Proprioception -Visual pathways -Central auditory pathways -Clinical correlates 	
7. Motor Pathways	4
<ul style="list-style-type: none"> -Cerebellar pathways -Basal nuclei circuits -Pyramidal and extrapyramidal tracts 	
8. Nerve cells	2
<ul style="list-style-type: none"> -Nerve impulse and neuronal responses -Neurotransmitters -Clinical correlates 	
9. Vestibular system	2
<ul style="list-style-type: none"> -Physiology of equilibrium -Clinical correlates 	
10. Diagnostic Techniques for Neurologic Disorders	2
<ul style="list-style-type: none"> -Brain imaging -Electroencephalography -Electromyography -Event-related potentials -Clinical correlates 	

Total hours (in class): 30

Please Attach copy of class syllabus and schedule as an example

Signature: _____
Chair

Date: _____

Signature: _____
Dean

Date: _____

Approved by Department: 3/31/17

Approved by College Council:

OFFICIAL COURSE SYLLABUS
Southeast Missouri State University

Department of	<u>Communication Disorders</u>	Course No.	<u>CD 629</u>
Title of Course:	<u>Neuroscience of Communication Disorders</u>		
		New	<u>X</u>

Instructor: Jayanti Ray, Ph.D. CCC-SLP
Office: Room 128, Clinic Building
Class Days and Times: M,W: 3-3:50 PM
Location of classroom: New clinic building, Room 127

Office Hours: M, W: 10-10:45 AM and 1-2:30 PM; T,TR: 12-3 PM

Office hours are subjected to change in case of emergencies and urgent meetings.

Office Phone: 986-6404; Cell phone (in case of emergency): 573-450-8540

E-mail: jray@semo.edu

Whom to contact with concerns:

Questions, comments, or requests regarding this course may be taken to your instructor. Unanswered questions or unresolved issues involving this class may be directed to Dr. Marcia Haims at mjbrown@semo.edu or 573-651-2488.

I. Catalog Description and Credit Hours of Course:

An advanced study of the nervous system, with emphasis on the structure and function of the human brain to understand various speech, language, cognitive, and swallowing disorders. (2 credit hours)

II. Prerequisite (s): Graduate standing.

III. Purposes or Objectives of the Course:

1. Use appropriate terminology related to the study of neuroanatomy and neurophysiology, including terms that relate to various neurological conditions
2. Identify key structures and functions of the central, peripheral, and autonomic nervous systems.
3. Describe the basic development of the nervous system.
4. Describe the major components of the cerebrovascular system.
5. Describe the parts of a neuron, as well as the basic neurophysiology of how neurons conduct electrical and chemical signaling within the nervous system.
6. Differentiate between the following in terms of function and impairment: upper motor neurons, lower motor neurons, corticobulbar tract, corticospinal tract.
7. Describe the basic components of the sensorimotor system, including the basal ganglia, cerebellum, thalamus, primary and association cortices, and ascending and descending pathways.
8. Perform a basic cranial nerve exam for speech and swallowing functions
9. Identify the basic neural components of the visual and auditory pathways.
10. Describe the major neural components that contribute to speech motor control and how damage to these contributes to motor speech disorders.
11. Identify the major language areas of the brain and describe how patterns of damage that contribute to the various manifestations of cognitive and language disorders.
12. Define higher order functions of the brain and explain how deficits manifest in patients.

13. Understand the basic findings from a neurological and neuropsychological examination.
14. Define neuroplasticity and relate how the basic principles of neuroplasticity apply to rehabilitation and brain function.

IV. Student Learning Outcomes (Minimum of 3)

- A. The student will demonstrate integration of the principles of neuroscience regarding the etiology, signs, and symptoms of motor speech disorders.
- B. The student will demonstrate integration of the principles of neuroscience regarding the etiology, signs, and symptoms of neurogenic swallowing disorders.
- C. The student will demonstrate the integration of the principles of neuroscience regarding the characteristics of cognitive and neurogenic language disorders.

V. Expectations of Students:

Upon completion of this course, students will be expected to do the following:

1. To use appropriate terminology related to the study of neuroanatomy and neurophysiology, including terms that relate to various neurological conditions in short clinical observational reports.
2. To describe the major neural components that contribute to speech motor control and how various sites of lesion are related to motor speech disorders.
3. To identify key structures and functions of the central, peripheral, and autonomic nervous systems and understand the sites of lesion for various language and cognitive disorders.
4. To identify key structures and functions of the central, peripheral, and autonomic nervous systems and understand the sites of lesion for various swallowing disorders.
5. To perform a basic cranial nerve exam for speech and swallowing functions.
6. To interpret basic findings from a neurological and neuropsychological examination.
7. To describe how neuroplasticity applies to the rehabilitation principles.
8. To deliver an oral presentation of their completed research paper to the class based on a given case study.
9. To participate in class/home assignments, quizzes, tests, and lab activities throughout the semester.

VI. Course Content or Outline (Indicate number of class hours per unit or section):

<u>Modules</u>	<u>No. of Class Hours</u>
2. An Overview of Essential Neurological Concepts and Principles -Divisions of the nervous system -Functional localization in the brain -Cortical and subcortical functions -Principles governing the human brain (e.g., laterality, neuroplasticity)	2
3. Development of the Nervous System -Cell division -Genetic inheritance -Clinical correlates	3
4. Anatomy of the Brain -Brainstem -Basal nuclei	6

-Thalamus and associated structures	
-The limbic pathways	
-Cerebellum	
-Meninges	
-Ventricles	
-Blood supply	
Vascular network	
Cerebral blood flow	
-Clinical correlates	
5. Anatomy of the Spinal Cord	2
-Motor nuclei and innervations	
-Sensory and motor tracts	
-Reflexes	
-Clinical correlates	
6. Cranial and Spinal Nerves	4
-Cranial nerve nuclei and pathways	
-Autonomic Nervous System	
-Clinical correlates	
7. Sensory Pathways	3
-Head and face	
-Proprioception	
-Visual pathways	
-Central auditory pathways	
-Clinical correlates	
8. Motor Pathways	4
-Cerebellar pathways	
-Basal nuclei circuits	
-Pyramidal and extrapyramidal tracts	
9. Nerve cells	2
-Nerve impulse and neuronal responses	
-Neurotransmitters	
-Clinical correlates	
10. Vestibular system	2
-Physiology of equilibrium	
-Clinical correlates	
11. Diagnostic Techniques for Neurologic Disorders	2
-Brain imaging	
-Electroencephalography	
-Electromyography	

- Event-related potentials
- Clinical correlates

Total hours (in class): 30

Note: Total number of expected hours (outside of classroom) for completion of course assignments: 90-100 hours

VII. Textbook(s) and/or Other Required Materials or Equipment:

A. Required Textbook/Materials:

1. Bhatnagar, S. (2014). Neuroscience for the Study of Communicative Disorders. (Fourth Edition). USA: Lippincot, Williams & Wilkins.
2. Supplementary materials:
 1. Trip database: www.tripdatabase.com; An attempt to bring together all the evidence based health care resources on the internet, with a dedicated neurology section and email updates
 2. Cochrane Library: www.update-software.com/cochrane; A synthesis of reliable evidence about the effects of health care
 3. American Academy of Neurology practice guidelines; www.aan.com/professionals/practice/guidelines.cfm
 4. North American evidence based aids to clinical decision making
 5. Neurosciences on the Internet; www.neuroguide.com; A comprehensive directory of internet neuroscience resources
 6. National Institute of Neurologic Disorders and Stroke: www.ninds.nih.gov; USA based funding and information resource
 7. National Organization for Rare Disorders: www.rarediseases.org; USA federation of voluntary health organizations dedicated to rare disorders
 8. Child Neurology: www.waisman.wisc.edu/child-neuro/ Portal for pediatric neurology resources
 9. Online Mendelian Inheritance in Man: www.ncbi.nlm.nih.gov/omim/; Catalogue of genes and genetic disorders
 10. Whole Brain Atlas: www.med.harvard.edu/AANLIB; Superbly illustrated examples of normal brain anatomy and neurological diseases
 11. RadiologyEducation.com; www.radiologyeducation.com; A directory of www radiology resources
 12. Clinical Neurophysiology; www.clinicalneurophysiology.org.uk; A British portal for clinical neurophysiology
 13. Clinical Neurophysiology on the Internet (www.neurophys.com); A directory of basic and clinical neurophysiology www resources
3. Journal articles and other selected professional resources: (visit www.asha.org)

VIII. Basis for Student Evaluation:

Grades will be determined per the following four elements:

Active participation in all class activities and lectures	10%
Active participation in quizzes	15%
Thoughtful, thorough, and timely completion of	30 %

weekly/monthly assignments

*An annotated bibliography of 15 current research articles covering the neurological bases of speech, language, cognition, and swallowing disorders.

*In-class presentations of case histories of patients with neurogenic speech and language disorders and identifying the sites of lesions.

Completion of self-directed learning modules to facilitate mastery of concepts using a variety of case scenarios and journal articles 15%

Completion of five unit exams and one final comprehensive exam 30%

Final Exam:

The final exam will be given during the week of May on a scheduled day according to the University Calendar.

Grade distribution

A	90% or above
B	80-89%
C	70-79%

IX. Course policies

1. Students should attend all scheduled classes. Please notify the instructor in case of absence due to emergency and other extenuating circumstances. Absence will be excused only for illness of the student or other family emergency. An excessive absence without any notice will negatively impact the grades.
2. Throughout the semester, you will receive necessary resources to augment your learning. Please keep up with the flow of information.
3. Labs will take place during class hours depending on the coverage of designated topics in the chapters.
4. Please invest sufficient hours to learn relevant course materials, as indicated in the syllabus. Please read your textbook regularly in order to keep track of topic progression.
5. Pre-reading before lectures is expected. You will be asked to do assigned homework in preparation for each class. Please be ready to share your answers/thoughts during class discussion. Points will be awarded for various class/take-home assignments.
6. Please improve your study organization by breaking down large chunks into digestible units.
7. Please participate in class group activities. They will help you learn the material as we go through the lectures and labs. It will also enhance your team skills.
8. Assignments after due date will not be accepted for grading. Please prepare the assignments according to the due dates provided on the syllabus. In case of emergency, please contact your instructor.
9. Bonus points will be available throughout the semester to stimulate critical thinking through various home assignments. Please take advantage of the same so that you are able to accumulate additional points.
10. It is the student's responsibility to refrain from academic dishonesty. Please visit the University website (student handbook) for details.

11. Please notify the instructor in advance if you have a documented disability and you need help with the classes.
12. If one or two classes during the semester get cancelled due to the instructor's professional obligations, the instructor's GA will be able to conduct the class.
13. Should you have difficulties understanding course materials, please see me as soon as possible.
14. You are encouraged to provide feedback and comments anytime during the semester to maximize the potential of our learning/teaching environment.
15. The syllabus is only a tentative guideline. You will be promptly notified if there is any change.
16. Grades will be posted on Moodle and will be updated every week for your viewing.

X. Other information

ACCESSIBILITY STATEMENT

SOUTHEAST MISSOURI STATE UNIVERSITY'S ACCESSIBILITY PLAN

Southeast Missouri State University will take such means as are necessary to ensure that no qualified disabled person is denied the benefits of, excluded from participation in, or otherwise subject to discrimination because Southeast Missouri State University's facilities are physically inaccessible to, or unusable by disabled persons. The accessibility standard required by Federal law for 'existing facilities' is that the recipient's program or activities when viewed in its entirety, must be readily accessible to disabled persons.

Southeast Missouri State University may meet this standard through such means as reassignment of classes, or other services to accessible locations, redesign equipment, assignment of aides, alterations of existing facilities, and construction of new accessible facilities. Southeast Missouri State University is not required to make structural changes in existing facilities where other methods are sufficient to comply with the accessibility standard described above.

Because scheduling classes, coordinating accommodations, and arranging housing in accessible facilities may require reasonable advance planning, students with disabilities accepted for admission should identify themselves and their disability within five days of the start of the semester of enrollment and indicate the nature of accommodation needed for their disability.

For more information, see the Disability Support Services page or contact Disability Support Services, room 302, University Center, One University Plaza ms1300, Cape Girardeau, MO 63701; (573)651-2273.

ACADEMIC HONESTY

Policy. Academic honesty is one of the most important qualities influencing the character and vitality of an educational institution. Academic misconduct or dishonesty is inconsistent with membership in an academic community and cannot be accepted. Violations of academic honesty represent a serious breach of discipline and may be considered grounds for disciplinary action, including dismissal from the University. Academic dishonesty is defined to include those acts which would deceive, cheat, or defraud so as to promote or enhance one's scholastic record. Knowingly or actively assisting any person in the commission of an above-mentioned act is also academic dishonesty. *Page 4 of 6* Students are responsible for upholding the principles of academic honesty in accordance with the "University Statement of Student Rights" found in the Undergraduate or Graduate Bulletin. The University requires that all assignments submitted to faculty members by students be the work of the individual student submitting the work. An exception would be group projects assigned by the instructor. In this situation, the work must be that of the group.

Academic dishonesty includes:

Plagiarism. In speaking or writing, plagiarism is the act of passing someone else's work off as one's own. In addition, plagiarism is defined as using the essential style and manner of expression of a source as if it were one's own. If there is any doubt, the student should consult his/her instructor or any manual of term paper or report writing. Violations of academic honesty include:

1. Presenting the exact words of a source without quotation marks;
2. Using another student's computer source code or algorithm or copying a laboratory report; or
3. Presenting information, judgments, ideas, or facts summarized from a source without giving credit.

Cheating. Cheating includes using or relying on the work of someone else in an inappropriate manner. It includes, but is not limited to, those activities where a student:

1. Obtains or attempts to obtain unauthorized knowledge of an examination's contents prior to the time of that examination;
2. Copies another student's work or intentionally allows others to copy assignments, examinations, source codes or designs;
3. Works in a group when she/he has been told to work individually;
4. Uses unauthorized reference material during an examination; or
5. Have someone else take an examination or takes the examination for another.

General Responsibilities for Academic Honesty. It is the University's responsibility to inform both students and faculty of their rights and responsibilities regarding such important matters as cheating and plagiarism. Most of what is considered unethical or dishonest behavior can be avoided if faculty and students clearly understand what constitutes such practices and their consequences. The University community should also be aware of the procedures to be followed should a breach of academic honesty occur.

The faculty member is responsible for clarification to his/her class of those standards of honesty for class assignments or functions where such standards may be unclear or when such standards vary from the accepted norm. Further, some faculty may choose to utilize preventive measures (multiple exams, alternate seating, etc.) to help insure the maintenance of academic honesty. However, the use of such measures is the prerogative of the individual faculty member and is not a responsibility or requirement of faculty in general.

The fundamental responsibility for the maintenance of honesty standards rests upon the student. It is the student's responsibility to be familiar with the University policy on academic honesty and to uphold standards of academic honesty at all times in all situations.

Protocol for Adjudicating Alleged Violations of Academic Honesty. Faculty members who discover evidence of academic dishonesty should contact the student within five business days of discovering the alleged dishonesty to arrange to meet and discuss the allegation. Prior to this *Page 5 of 6* meeting the faculty member may consult with the Department Chairperson, the appropriate Dean, and the Office of Judicial Affairs. The following sections describe the procedures to be adhered to in each of the listed instances: the student acknowledges the violation, the student denies the violation, and the appeals process. If the faculty member is the Department Chairperson, a departmental designee will assume the Department Chairperson's role in this protocol and references to the Department Chairperson should be read as departmental designee. The procedures below should be followed with online, ITV or face-to-face classes.

From Faculty Senate Bill 11-A-16 <http://www.semo.edu/facultysenate/handbook/5d.html>

CIVILITY AND HARASSMENT

A major determinant of a successful educational experience is a shared sense of respect among and between the students and their instructor. Some of the texts and issues we will discuss may cause disagreements among members of the class. Multiple viewpoints are an essential component of any college course, and disagreeing with someone is fine. However, rude, disrespectful, aggressive, offensive, harassing, or demeaning behavior—either face-to-face or in an online discussion—toward anyone in the class will not be tolerated; students are expected to abide by the Code of Student Conduct (<http://www6.semo.edu/stuconduct/code.html>). Should a student feel someone has acted inappropriately toward them in class, please speak with the instructor at once so the situation can be addressed. The instructor for the course reserves the right to ask a student to leave the classroom or the online discussion for any inappropriate behavior, and if the situation warrants, may call campus security to remove the offending student from class.