Neuroanatomy for Speech, Language and Hearing
SPA 4104-521, 522, 523
Fall 2014
(3 credit hours)
COURSE SYLLABUS
This course is 100% online via Canvas

Instructor Contact Information
Instructor: Donna Polelle, Ph.D., CCC-SLP
Office Location: B 213
Office Phone: (941) 359-4249
E-mail: polelle@usf.edu

Prerequisite: SPA 3101
Office Hours: Available online Tuesdays 4-5 pm via Blackboard Collaborate and other times by appointment. Please e-mail Dr. Polelle to confirm a Tuesday appointment or to arrange a different day & time.

Class Information
Website: https://my.usf.edu
Asynchronous online class
Access the course via Canvas:
Go to my.usf.edu
Log in with your Net-ID & password
Click on Canvas at the top of page

Need help with Canvas?
Canvas Support is available through USFSM E-Learning staff from 9am to 5pm Monday through Friday. Please call or email Carlos Montoya | cmmontoya@sar.usf.edu | 941-359-4295

The USF Tampa IT Helpdesk provides 24 hour support for Canvas. Please call 813-974-1222 or email help@usf.edu if you need assistance outside of USFSM’s E-Learning hours.

Additionally, information on how to use Canvas is available at http://usfsm.edu/e-learning-services/student-resources/
Canvas tutorials can be found in the Student Quickstart Guide at http://guides.instructure.com/m/8470.
This class syllabus is also posted in Canvas, the online course management system.

*Please check your USF email daily for class announcements and communications.

PROGRAM MISSION STATEMENT
The mission of the CSD/SLP program is to prepare students for eventual careers in Speech-Language Pathology (SLP) or Audiology. This preparation includes the acquisition of foundational concepts of speech, language, and hearing sciences, advancement of critical thinking and communication skills, and understanding of professional conduct and scope of practice at a level appropriate for the position of SLP Assistant or Audiology Assistant.
COURSE DESCRIPTION
Students will learn neuroanatomical & neurophysiological principles, structures, and functions that subserve speech, hearing, language and cognition. A case-based approach will enable understanding of behavioral manifestations of neuropathologies.

This is one of several courses required for the Bachelor’s degree in Communication Sciences and Disorders (Concentration: Speech Language Sciences).

COURSE TOPICS
Please refer to the course schedule section of this syllabus for content and topics.

OBJECTIVES AND DESIRED STUDENT LEARNING OUTCOMES
The purpose of this course is to introduce students to the neural substrates of human speech, language, hearing and other functions (e.g., swallowing and memory). This knowledge will provide a foundation for further study in the field of communication sciences and disorders and achievement of learning outcomes consistent with the “knowledge and skills acquisition” (KASA) standards developed by the American Speech-Language-Hearing Association.

1. Students will be able to identify specific neurological landmarks and systems specific to speech, hearing or related functions. (KASA Standard III-B)
2. Students will understand how damage to specific neurological landmarks and/or systems may impair specific speech, language, hearing or related functions. (KASA Standard IV-B4).

ASHA Knowledge and Skills Acquisition (KASA) Standards to be Achieved
This course is designed to provide a “knowledge and skills acquisition (KASA)” experience for students who are preparing to apply for the Certificate of Clinical Competence (CCC) in Speech-Language Pathology from the American Speech-Language-Hearing Association (ASHA). Specifically, the course can be a means by which the student can meet the following standards.

<table>
<thead>
<tr>
<th>KASA STANDARD</th>
<th>Mechanism for Learning (HOW ACHIEVED?)</th>
<th>Type of Evaluation (HOW ASSESSED?)</th>
</tr>
</thead>
</table>

These standards will be achieved through a combination of lectures (on Canvas), assigned readings, and other assignments. Progress toward these goals will be measured by your performance on assignments, quizzes, and tests.
TEXT AND MATERIALS

REQUIRED TEXTBOOK, EQUIPMENT & MATERIALS
2. Additional assignments* (see below) and materials are posted in CANVAS. Access to CANVAS is required.
   Students will also need a scanner, smartphone app, camera, or other electronic device to create an image and upload a file of completed worksheets to CANVAS. Files must be in a format that is able to be opened by the instructor (e.g., pdf, doc, docx, jpeg).
4. Colored pencils or markers. A box of 24 colors is recommended.

OTHER TECHNOLOGY REQUIREMENTS
1. Reliable daily internet connection; high speed connection (DSL/cable or better) is highly recommended.
2. Active USF net ID - For help go to http://it.usf.edu/services/netid

* Assignments refer to all graded and ungraded required work associated with this course including readings, lectures, videos, worksheets, diagrams, discussions, quizzes, and exams.

GRADING, EVALUATION AND ATTENDANCE POLICIES

Assignments/Assessments
Due dates for assignments/assessments are provided in CANVAS and are listed on the course schedule contained in this syllabus. Due dates typically are Mondays at noon unless otherwise specified on Canvas and in the course schedule. Exams are exceptions. Also, the first discussion is due by Friday of the first week of class at 11:59 pm EST; this is a “first class attendance” assignment (see first class attendance section).

1. Lectures: The course will provide recorded lectures accessed via the Panopto link in CANVAS.

2. Readings & Videos: Required readings are assigned from the course textbook and other documents that are uploaded to CANVAS. Links to videos on special topics are also provided within the week’s Module in CANVAS. Readings and videos correspond to the topics presented in lectures. Quizzes and exams assess your new knowledge from the readings, lectures, and powerpoint lecture notes, as well as application of class information and concepts.

3. Worksheets Assignment (5 points each)
   Within Modules students will find diagram worksheets for download and printing. Complete the assignment by coloring the structures and/or labeling the diagrams as per the instructions. You must also legibly sign your name on each page. Each worksheet assignment is graded as complete (5 points); minimal missing information (such as name not signed on all pages), one item not completed, or on item not completed correctly (4 points); multiple omitted items or multiple incorrectly completed items (1-3 points); not completed by due date or nearly all items are missing or incorrect (0 points).

4. Discussions in CANVAS (5 or 10 points each; see CANVAS for points corresponding to each discussion)
   Several discussions are scheduled Via Canvas during the semester. The discussions are intended to engage you in critical thinking and application of class information. Grades for these written discussions will be based the following: quality of content, writing conventions (i.e., spelling, grammar, punctuation, capitalization, sentence constructions), following the discussion instructions, evidence of critical thinking, originality of ideas, professional vocabulary use, clarity including good support for statements (including examples as appropriate), organization, appropriateness of length, succinctness, completeness, professionalism, and connections with previously learned material.
5. **Quizzes (10 points each; 5 points for module 15 quiz)**
Quizzes are scheduled throughout the semester to provide students with feedback regarding mastery of course material, and to serve as an additional learning tool. Quizzes are open book. You are encouraged to gather and use resources to complete the quiz, except you may not complete the quiz with assistance from, or collaboration with other persons as this is considered cheating. The quiz for each module will focus on knowledge gained from that week's lecture, lecture slides and readings, as well as application of the knowledge. Quizzes will remain open and available in CANVAS from Monday at noon EST until the following Monday at noon EST. You will have one attempt during a 60 minute period to complete each quiz. Generally, answers to quizzes will be available Monday at 1 pm EST after the quiz closes; exceptions may occur. Students not completing a quiz within the 7 day period will receive a “0”; no late quizzes are allowed. It is recommended that you complete quizzes and exams well in advance of the due date and time. This will allow you to address any technology problem and still meet the deadline.

6. **Exams (80 points for Exam 1, 100 points for Exam 2, 100 points for Final Exam)**
This course has three exams including the final exam. Examinations assess what you have learned about neuroscience throughout the semester. Exams are cumulative, meaning that, each exam will assess knowledge gained from all of the previous modules. Exams must be taken on one of the three scheduled dates (see class schedule section of this syllabus). You will have 75 minutes to complete Exam 1, 90 minutes to complete Exam 2, and 2 hours to complete the Final Exam. Answers for these examinations will not be posted; however, students wishing to review their completed exam are urged to schedule an online individual exam review conference with Dr. Polelle.

**GENERAL INSTRUCTIONS FOR STUDENTS**

**Assignments Policy & Class Expectations**
Students are responsible for completing all weekly class assignments and are accountable for learning course content. It is expected that students will take their studies seriously, and demonstrate professional and ethical integrity including timely completion and submission of assignments. All assignments must be completed by the due date and time listed in CANVAS.

**Due Dates**
The course schedule is based on a Monday-Monday week. Unless otherwise specified, work is due (uploaded, posted, or completed in Canvas) by noon EST on Monday of the weekly module. All due dates are firm deadlines and not negotiable.

**Penalty for late submissions:** An assignment submitted past the due date indicated will be penalized 3 points per day late. After 3 days late, the assignment will receive a zero. NOTE: Be sure your assignments are correctly uploaded and attached in Canvas. “Empty” assignments (i.e., submission without attachment) will be considered LATE and points will be deducted accordingly. Exception: There is no opportunity to take a late quiz. No late penalty will occur on the Module 1 Discussion assignment.

You will be notified if your submission cannot be opened by the instructor and the assignment must be resubmitted within 24 hours from the time of the instructor’s request to resubmit. If resubmission is beyond 24 hours of the request, late penalties (see above) will apply. The request for resubmission by the instructor may be via email or comment in your grade for the assignment; therefore, please check these promptly and regularly. An exception may be considered (with evidence of written documentation, e.g., hospital discharge note, physician note, death certificate) in cases of a serious, unforeseen emergency or grave situation (e.g., accident, severe illness, hospitalization, death, etc.) which affects your ability to complete an assignment before the due date. Should you experience an emergency/grave situation, you must notify the instructor via e-mail before the assignment due date. Technology failure is never considered an emergency or serious situation. Please ensure that you begin work on each “assignment” well in advance of the deadline; this will allow sufficient time to resolve any technology failure that may occur. Resources for assistance with technology difficulty include USF Tampa IT Helpdesk or USFSM E-Learning staff.
FIRST DAY ATTENDANCE
First day attendance will be taken at the end of the day on Friday of the first week of class.
Students must complete the Module 1 Discussion to indicate attendance in the class.
Students not completing the Module 1 Discussion assignment (or sending the instructor an e-mail indicating intent to continue in the class) by the end of the day on Friday of the first week of class will be marked absent which may result in the student being dropped from the course.

GRADING
The sum of all of the points earned during this class (totals from all assignments and assessments) will determine your final grade for the course. The maximum number of points possible is 500 points.
No extra credit assignments are provided.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>125</td>
</tr>
<tr>
<td>Exams</td>
<td>280</td>
</tr>
<tr>
<td>Discussions</td>
<td>35</td>
</tr>
<tr>
<td>Worksheets</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Final grade for this course is determined by the total points earned during the semester. See the table below for points, grade and corresponding percentages.

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>490-500</td>
<td>A+</td>
<td>98-100%</td>
<td>390-399</td>
<td>C+</td>
<td>78-79%</td>
</tr>
<tr>
<td>465-489</td>
<td>A</td>
<td>93-97%</td>
<td>365-389</td>
<td>C</td>
<td>73-77%</td>
</tr>
<tr>
<td>450-464</td>
<td>A-</td>
<td>90-92%</td>
<td>350-364</td>
<td>C-</td>
<td>70-72%</td>
</tr>
<tr>
<td>440-449</td>
<td>B+</td>
<td>88-89%</td>
<td>340-349</td>
<td>D+</td>
<td>68-69%</td>
</tr>
<tr>
<td>415-439</td>
<td>B</td>
<td>83-87%</td>
<td>315-339</td>
<td>D</td>
<td>63-67%</td>
</tr>
<tr>
<td>400-414</td>
<td>B-</td>
<td>80-82%</td>
<td>300-314</td>
<td>D-</td>
<td>60-62%</td>
</tr>
<tr>
<td>≥ 300</td>
<td>F</td>
<td>below 60%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please do your very best on each assignment as no rounding of grades will occur, example: 489.999 points = A (not A+).

INCOMPLETE GRADES
A course grade of “I” (Incomplete) may be awarded at the discretion of the instructor when required “assignments” have not been completed by the end of the term for documented reasons beyond the student’s control (e.g., extended hospitalization), and the student was in good standing prior to the situation. Students are advised to initiate a written contract for incomplete grades. The contract should include a description of the work to be completed, the date by which the work is to be submitted and should be approved and signed by the instructor.

CORRESPONDENCE AND COMMUNICATION WITH INSTRUCTOR & COURSE ANNOUNCEMENTS
Please use messaging in Canvas or e-mail polelle@usf.edu and place our course number (SPA 4104) in the subject line. This will be much appreciated and ensure that your e-mail will not be lost among others. E-mails are typically checked Monday morning through Saturday morning. If I do not respond to your e-mail by the following day, assume that I did not receive it and please resend the e-mail. While I will attempt to respond to your e-mail as quickly as possible, other professional duties (meetings, grading, conference attendance) may
not allow me to respond to you immediately. Please do not send e-mails from a non-USF e-mail address; these may not be deliverable and I will not be able to recognize you as a student in this class.

*Students are responsible for checking USF e-mail regularly for class announcements and other important communication from the instructor.

**USFSM AND USF SYSTEM POLICIES**

A. Academic Dishonesty: The University considers any form of plagiarism or cheating on exams, projects, or papers to be unacceptable behavior. Please be sure to review the university’s policy in the USFSM Catalog, the USF System Academic Integrity of Students, and the USF System Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88

B. Academic Disruption: The University does not tolerate behavior that disrupts the learning process. The policy for addressing academic disruption is included with Academic Dishonesty in the USFSM Catalog, USF System Academic Integrity of Students, and the USF System Student Code of Conduct. Current and archived catalogs may be found at: http://usfsm.edu/academics/ and the USF Student Code of Conduct can be found at http://www.sa.usf.edu/srr/page.asp?id=88

C. Contingency Plans: In the event of an emergency, it may be necessary for USFSM to suspend normal operations. During this time, USFSM may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Blackboard Collaborate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main USFSM and College websites, emails, and MoBull messages for important general information. The USF hotline at 1 (800) 992-4231 is updated with pre-recorded information during an emergency. See the Campus Police Website for further information.

D. Disabilities Accommodation: Students are responsible for registering with the Office of Students with Disabilities Services (SDS) in order to receive academic accommodations. Reasonable notice must be given to the SDS office (typically 5 working days) for accommodations to be arranged. It is the responsibility of the student to provide each instructor with a copy of the official Memo of Accommodation. Contact Information: Disability Coordinator, 941-359-4714; website http://usfsm.edu/disability-services/

E. Fire Alarm Instructions: At the beginning of each semester please note the emergency exit maps posted in each classroom. These signs are marked with the primary evacuation route (red) and secondary evacuation route (orange) in case the building needs to be evacuated. See Emergency Evacuation Procedures.

F. Religious Observances: USFSM recognizes the right of students and faculty to observe major religious holidays. Students who anticipate the necessity of being absent from class for a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second week of classes.

G. Web Portal Information: Every newly enrolled USF student receives an official USF e-mail account. Students receive official USF correspondence and Canvas course information via that address.

H. Emergency Preparedness: It is strongly recommended that you become familiar with the USF Sarasota-Manatee Emergency Action Plan on the Safety Preparedness. See information available on the USFSM student and faculty webpages at www.usfsm.edu
H. Academic Support Services: The Information Commons at USFSM provides students with individual and group study spaces, computers, printers, and various media equipment for temporary use. Information Commons is staffed with a librarian, learning support faculty, tutors, and technology and e-learning specialists. Students challenged by the rigors of academic writing, mathematics, or other course content are urged to contact their professors early in the semester to chart out a plan for academic success, and/or regularly use the tutoring services provided by the Learning Support Services, which are provided at no cost to students.

I. Instructor Copyright
Students may not sell notes or other course materials; students may not copy and distribute any course materials without the written consent of the instructor.

Course Schedule & Assignments (see next page)
<table>
<thead>
<tr>
<th>Module</th>
<th>Date: week beginning</th>
<th>Lectures Topics</th>
<th>Textbook Readings</th>
<th>Quizzes &amp; Exams</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/25</td>
<td>Neuroanatomy &amp; Neuroscience: Essential Concepts &amp; Principles</td>
<td>Chapter 1</td>
<td>Quiz 1 (10) due 9/1/14 at noon</td>
<td>* Discussion Post (5 pts) due Fri 8/29/14 (first day attendance assign.) -Worksheets (5) due 9/1 at noon</td>
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<tr>
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<tr>
<td>9/1/14</td>
<td>Labor Day Holiday</td>
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</tr>
<tr>
<td>2</td>
<td>9/1</td>
<td>Gross Anatomy of the Central Nervous System</td>
<td>Chapter 2 pages 35-76 &amp; 84-94; Kleim &amp; Jones (2008) article</td>
<td>Quiz 2 (10)</td>
<td>- Worksheets (5) -Discussion (10)</td>
</tr>
<tr>
<td>3</td>
<td>9/8</td>
<td>Internal Anatomy of the Central Nervous System</td>
<td>Chapter 3</td>
<td>Quiz 3 (10)</td>
<td>- Worksheets (5)</td>
</tr>
<tr>
<td>4</td>
<td>9/15</td>
<td>Development of the Nervous System; Nerve Cell Physiology</td>
<td>Chapter 4</td>
<td>Quiz 4 (10)</td>
<td>-Worksheets (5) -Discussion (10)</td>
</tr>
<tr>
<td>5</td>
<td>9/22</td>
<td>Exam Week</td>
<td></td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>9/29</td>
<td>Diencephalon: Thalamus &amp; Associated Structures; Cerebellum</td>
<td>Chapter 6</td>
<td>Quiz Module 6 (10)</td>
<td>-Worksheets (5)</td>
</tr>
<tr>
<td>7</td>
<td>10/6</td>
<td>Meninges, Ventricles &amp; Cerebrospinal Fluid; Cerebrovascular System</td>
<td>Pages 77-84</td>
<td>Quiz Module 7 (10)</td>
<td>-Worksheets (5)</td>
</tr>
<tr>
<td>8</td>
<td>10/13</td>
<td>Auditory System &amp; Vestibular System</td>
<td>Chapter 9</td>
<td>Quiz Module 8 (10)</td>
<td>-Worksheets (5)</td>
</tr>
<tr>
<td>9</td>
<td>10/20</td>
<td>Somatosensory System Visual System</td>
<td>Chapter 11</td>
<td>Quiz Module 9 (10)</td>
<td>-Worksheets (5)</td>
</tr>
<tr>
<td>10</td>
<td>10/27</td>
<td>Exam Week</td>
<td></td>
<td></td>
<td>N/A</td>
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<tr>
<td>11</td>
<td></td>
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<tr>
<td>11/01/14</td>
<td>Last day to drop with a “W”; no refund &amp; no academic penalty</td>
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<tr>
<td>11/11/14</td>
<td>Veteran’s Day Holiday</td>
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<tr>
<td>12</td>
<td>11/3</td>
<td>Motor System:</td>
<td>Chapter 13</td>
<td>Quiz Module 11 (10)</td>
<td>-Worksheets (5)</td>
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<tr>
<td></td>
<td></td>
<td>Spinal Cord</td>
<td>Chapter 15</td>
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<tr>
<td></td>
<td></td>
<td>Basal Ganglia</td>
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<tr>
<td>13</td>
<td>11/10</td>
<td>Motor Cortex</td>
<td>Chapter 16</td>
<td>Quiz Module 12 (10)</td>
<td>-Worksheets (5) -Discussion (10)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cranial Nerves &amp; Speech Disorders</td>
<td>Pages 84-87</td>
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<td></td>
<td>Chapter 17</td>
<td></td>
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<tr>
<td>14</td>
<td>11/17</td>
<td>Autonomic Nervous System, Limbic System, Hypothalamus, &amp; Reticular Formation</td>
<td>Chapter 18</td>
<td>Quiz Module 13 (10)</td>
<td>-Worksheets (5)</td>
</tr>
<tr>
<td>14</td>
<td>11/24</td>
<td>Cerebral Cortex: Higher Mental Functions</td>
<td>Chapter 19</td>
<td>Quiz Module 14 (10)</td>
<td>-Worksheets (5)</td>
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<tr>
<td></td>
<td>11/27 &amp; 11/28/14</td>
<td>Thanksgiving Holiday</td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>12/1</td>
<td>Diagnostic Imaging/Testing &amp; Neurologic Concepts</td>
<td>Chapter 20</td>
<td>Quiz Module 15 (5)</td>
<td>Optional final exam live review session: Tuesday, Dec. 2 7-8 pm EST (see announcement for details)</td>
</tr>
<tr>
<td>16</td>
<td>12/06 through 12/09</td>
<td>Final Exam</td>
<td></td>
<td></td>
<td>*Final Exam (100) Available only Sat, Dec. 6 Sun, Dec. 7 Mon, Dec. 8</td>
</tr>
</tbody>
</table>

**RESOURCES**
3 D Brain [iPhone and iPad app] (see Cold Spring Harbor Laboratory in references)

Academy of Neurologic Communication Disorders & Sciences (ANCDS)
[www.ancds.org](http://www.ancds.org)

American Speech-Language-Hearing Association
[www.asha.org](http://www.asha.org)

**REFERENCES** (next page)
REFERENCES


