I. MISSION STATEMENT

The larger mission of the Department of Communication Sciences and Disorders (CSD) is to provide its students with a liberal arts education through the College of Arts and Sciences, including instruction in the arts and sciences, communication skills, habits of independent thought, and the understanding of diverse cultures. The specific mission of CSD is to provide academic and clinical instruction, supervised clinical practica, and research experience for students that will lead to state, regional and national accreditation and licensing; to provide clinical services to individuals, groups and agencies within the University and the greater Grand Forks area; to provide professional leadership in local, state, and national organizations; to contribute to the body of knowledge concerning communication sciences and communication disorders; and to serve the University through participation in its governance. This mission is directed at meeting the interests and needs of the University of North Dakota constituency.

The Undergraduate Major

The undergraduate coursework in CSD is grounded in a liberal arts education. The undergraduate degree is designed to prepare the student to become a lifelong learner, a critical thinker, and a problem solver. The coursework also is designed to prepare the undergraduate major to pursue graduate work.

The Master’s Degree Program

A master’s degree in speech-language pathology is required for professional certification in the field of speech-language pathology. The master’s degree program at UND has been accredited by the Council on Academic Accreditation in Speech-Language Pathology and Audiology of the American Speech-Language and Hearing Association (ASHA).

The Ph.D. Program

This program provides a program of study in normal and disordered speech, language, and hearing, with an emphasis on the acquisition of research skills, that prepares the student for employment in a variety of settings including university teaching and research, clinical services and research, and research and/or consultation in industry.

II. Student Learning Goals and Objectives and Their Link to Coursework: the KASA Form

The basis of CSD’s learning goals and objectives are the 2005-mandated ASHA standards for critical knowledge and skills necessary for the practice of speech-language pathology. These standards outline the knowledge and skills that are expected of all students completing a master’s degree in accredited programs in speech-language pathology. The standards are listed (i.e., Standard III-A, Standard III-B, etc.) in the accompanying form, titled ASSESSMENT OF KNOWLEDGE AND SKILLS SUMMARY (referred to as the KASA form in the field and in the rest of this document).
Each student has a KASA form in his/her file, and the KASA form serves as a record that tracks each student’s progress through the CSD curriculum, both at the undergraduate and graduate levels. As the student successfully moves through the curriculum and completes the coursework that satisfies each standard, that standard is checked off.

The content of CSD courses is in the great majority of cases aimed at satisfying the various ASHA standards. Each course syllabus lists the specific objectives, outcomes, and assessment methods and criteria for that course. A listing of the specific objectives and outcomes for each course is listed in the **CSD Learning Outcomes**. Most courses include objectives and outcomes that apply to several ASHA standards. The KASA form ties the course objectives to the ASHA standards by listing, under each standard, the various courses that contain objectives and outcomes that satisfy the standard.

The ASHA standards mandate the acquisition of a large body of knowledge and skills that is gained through both undergraduate and graduate course work. A student who obtains a master’s in speech-language pathology in reality has spent the better part of two years of undergraduate education as well as two years of graduate education obtaining the necessary course work. This is reflected in the KASA form, which lists both undergraduate and graduate courses. Thus, an assessment plan for CSD must include both undergraduate and graduate course work.

**III. Specific Assessment Methods for Learning Outcomes**

The ASHA standards require that CSD specify its assessment methods for the various learning outcomes, its criteria for having successfully achieved learning objectives and outcomes, and, in addition, its remediation procedures for students who have not met the assessment criteria. Students are not given credit for having met a particular standard until assessment criteria for that standard have been met. Assessment methods and criteria are stated in the course syllabi, as are remediation processes. The latter involve, in general, reviewing course material and re-examination or re-doing assignments. A listing of the specific assessment methods, assessment criteria, and remediation processes is provided in the **CSD Learning Outcomes**.

**IV. Data Collection, Analysis, and Documentation**

At the end of each semester, each instructor will generate a list for each course taught, indicating (1) which students have met assessment criteria with remediation, and (2) which students have not met the assessment criteria for each of their courses. Such a list will be generated if there is at least one student who needed remediation or failed to meet the assessment criteria. The instructor will send these lists to the CSD administrative secretary and the instructor will note these results with their dates on the students’ KASA forms wherever the course appears on the form. As the student fulfills the coursework requirements for the ASHA standards on the KASA form, these standards will be checked off and dated. Thus, the KASA forms will provide a running, comprehensive record of students’ achievement of the learning goals for all courses.
The major data analysis planned is that described in (1) below. Those in (2), (3) and (4) may be used. Others may be used as the need arises.

(1) A finer-grained analysis of these data, indicating exactly which course goals need remediation or are not being met can be obtained, if regarded as useful in certain instances, by asking instructors to analyze their records.

(2) Advisors will be asked to review achievement data for individual students to monitor their progress.

(3) Aggregate data for courses under any ASHA standard or area of the curriculum can be compiled for curriculum planning purposes.

(4) Other useful byproducts can be extracted from the KASA data. For example, it will be possible to determine the total number of students completing all courses listed on the KASA form for each semester.

(5) If no remediation was conducted in a course, the instructor will not be required to generate any list.

V. Other Assessment Tools

Clinical Evaluations: CSD uses the following methods of assessing students’ clinical skills.

(1) CSD clinic supervisors provide extensive written evaluations of student clinic performance. These evaluations are done in mid-semester and at the end of the semester and become part of the student’s file. The evaluations are used in both undergraduate and graduate clinical practica.

(2) Questionnaires concerning the performance of student clinicians are sent to external site supervisors. (All CSD students in the master’s program complete externships at hospitals and clinics in this area and elsewhere.) The questionnaires provide feedback on both the students’ performance and their training. They are currently kept in the files of the clinic coordinator.

The records alluded to in (1) and (2) will be analyzed by the clinic coordinator to determine strengths and weaknesses in the clinical curriculum at the end of the academic year.

Comprehensive Examinations: Master’s students complete a series of comprehensive examinations in the various areas of the curriculum (e.g., fluency, phonatory disorders, etc.) Exam criteria are established by the faculty member responsible for the area of the curriculum examined. Students must retake examinations in cases where performance is not satisfactory. Faculty will be asked to summarize the examination results in their respective areas and forward these to the chair.

Thesis/Independent Studies: All master’s students write theses and independent studies under the direction of the graduate faculty. These projects can yield significant information about the research and writing skills of the master’s students. Thesis and independent study advisors will be asked to present reports summarizing the research and writing skills of the students who complete these projects under their supervision.

VI. How the Assessment Results will be Used

A faculty meeting, held at the beginning of the academic year, will be dedicated to the presentation and discussion of the assessment data from the previous academic year. At that time, the faculty will decide whether the data warrant program changes. The data will include the following:
(1) The KASA form data.
(2) The clinic skills data.
(3) The comprehensive examinations data.
(4) The thesis/independent study data.
LEARNING OUTCOMES AND ASSESSMENT METHODS
DEPARTMENT OF COMMUNICATION SCIENCES AND DISORDERS
May 31, 2012

CSD 333 ARTICULATION & PHONOLOGICAL DEVELOPMENT & DISORDERS

Alycia Cummings, Ph.D.

UNIT 1: THE GOAL OF THIS UNIT IS TO PROVIDE YOU WITH INTRODUCTORY INFORMATION ABOUT ARTICULATION/PHONOLOGY AND ITS RELATION TO THE FIELD OF COMMUNICATION DISORDERS Chapter 1-4

KNOWLEDGE OUTCOMES: ASHA STANDARD III-B-3
THE STUDENT WILL UNDERSTAND:
- THE DIFFERENCE BETWEEN ARTICULATION AND PHONOLOGY
- THE CONCEPTS OF PHONETICS VERSUS PHONOLOGY AND FORM VERSUS FUNCTION
- THE DYNAMIC NATURE OF THE ARTICULATORY SYSTEM
- THE RATIONALE OF USE OF THE IPA
- THE TERMS “PHONOLOGICAL PATTERNS” AND “PHONOLOGICAL PROCESSES”

SKILLS OUTCOMES:
THE STUDENT WILL DEFINE RELEVANT TERMS ASSOCIATED WITH ARTICULATION AND PHONOLOGY (E.G., PHONETIC, PHONEMIC, SUBSTITUTION, DISTORTION, OMISSION, STRIDENCY, VELARIZATION, FACILITATION, STIMULABILITY, GENERALIZATION).
ASSESSMENT: THE STUDENT WILL BE REQUIRED TO SUCCESSFULLY DEFINE AND USE THESE TERMS MEANINGFULLY ON PAPER/PENCIL EXAMINATIONS

UNIT 2: THE GOAL OF THIS UNIT IS TO PROVIDE YOU WITH INFORMATION ABOUT THE DEVELOPMENT OF PHONOLOGY AND ARTICULATION, Chapter 5

KNOWLEDGE OUTCOMES: ASHA STANDARD III-C-1A, 1B, 1C, 1D, 1E, 1F, 1G
THE STUDENT WILL UNDERSTAND:
- THE DEVELOPMENT OF STRUCTURE AND FUNCTION OF THE ORAL MECHANISM
- THE CHARACTERISTICS OF PRELINGUISTIC BEHAVIOR
- EARLY SPEECH SOUNDS AND PHONOLOGICAL PATTERNS
- THE SPEECH CHARACTERISTICS OF INDIVIDUALS AS THEY PROGRESS THROUGH THE FOUR STAGES OF DEVELOPMENT

SKILL OUTCOMES:
THE STUDENT WILL BE REQUIRED TO SUCCESSFULLY DESCRIBE THE 4 STAGES OF SPEECH DEVELOPMENT (STAGE 1 –BIRTH, THROUGH STAGE 4-5 YEARS AND OLDER).
ASSESSMENT: THIS SKILL WILL BE MONITORED AND EVALUATED THROUGH PERFORMANCE ON PAPER/PENCIL EXAMINATIONS.

UNIT 3: THE GOAL OF THIS UNIT IS TO PROMOTE YOUR KNOWLEDGE OF DATA COLLECTION AND METHODS OF EVALUATING ARTICULATION AND PHONOLOGY, Chapters 6-7

KNOWLEDGE OUTCOMES: ASHA STANDARD III-D-1A, 1B, 1C, 1D
THE STUDENT WILL UNDERSTAND:
- THE PURPOSES OF ARTICULATORY/PHONOLOGICAL TESTS
- THE CONTEXT IN WHICH BEHAVIORS ARE EVALUATED
- THE MANNER IN WHICH BEHAVIORS ARE RECORDED AND ELICITED
SKILL OUTCOMES: ASHA Standard IV-G-1a
The student will describe characteristics of specific articulation/phonological disorders/delays the student will demonstrate the ability to select age and culturally/linguistically appropriate diagnostic instruments for specific populations.

ASSESSMENT: These skills will be evaluated by having students complete worksheets depicting various articulatory and/or phonological problems, view videotapes of children and adults with various speech characteristics, score and interpret various formal and informal diagnostics procedures, successfully complete in-class worksheets and paper/pencil examinations.

Unit 4: The goals of this unit are (1) to promote your knowledge about speech characteristics of special populations (those with disorders) and those with differences (CLD) and (2) to provide you with a solid information base about phonetic and/or phonological therapeutic approaches to help clients achieve normal speech production, Chapters 8-10.

KNOWLEDGE OUTCOMES: ASHA Standard III-D-1A, 1B, 1C, 1D
The student will understand:
- The speech characteristics of individuals from special populations (cleft palate, hearing impairment, developmental delay and motor speech disorders).
- The speech characteristics of individuals who speak English as a second language (CLD).
- Appropriate treatment approaches for preschool, school age and adult clients who display articulation/phonological delays/disorders.

SKILL OUTCOMES: ASHA STANDARD IV-G-2A
The student will describe speech characteristics of individuals from special populations (see above) and select appropriate diagnostic tests to evaluate these individuals the student will differentiate articulation disorders and differences from phonological delays and disorders by identifying, specifying and categorizing characteristics typical of each.

ASSESSMENT: These skills will be evaluated by having students discuss case studies presented in class, write long range goals, short term objectives and identify treatment approaches for specific situations. Students will also be expected to complete paper/pencil examinations.

REMEDICATION:
A failure to achieve 70% on all course exams and assignments will require remedial (additional) work in order to meet ASHA certification requirements. Remedial work will include a comprehensive review of the
TOPICS TREATED FOLLOWED BY A WRITTEN COMPREHENSIVE EXAMINATION ON WHICH A SCORE OF 70% MUST BE ACHIEVED. SCORES ON REMEDIATION ACTIVITIES TO ACHIEVE THE MINIMUM LEVEL OF COMPETENCY ON THE KNOWLEDGE AND SKILL OUTCOMES WILL NOT BE USED TO COMPUTE THE GRADE IN THE COURSE.

T & L 400: METHODS/MATERIALS
School Speech, Language, and Hearing Programs

Instructor: Mary Jo Schill, M. A., Clinical Assistant Professor

Outcomes: The following learner outcomes have been identified for this course. Students who satisfactorily (grade of “C” or above) complete this course can expect to achieve the following outcomes:

Knowledge Outcomes

Students will learn:

1. The basic concepts of an educational model of service delivery and how it differs from a medical model

2. The core roles of a school speech-language pathologist including:
   - Prevention
   - Identification
   - Assessment
   - Evaluation
   - Eligibility determination
   - IEP/IFSP development
   - Caseload management
   - Intervention
   - Counseling
   - Re-evaluation
   - Transition
   - Dismissal
   - Supervision
   - Documentation and accountability

3. General historical information about the profession of speech-language pathology in the schools and how this information provides the context for current school programs

4. The legislative and regulatory issues that provide the foundation for educational service delivery

5. The basic tenets of the Individuals with Disabilities Education Act including the most recent amendments

6. The rights and due process safeguards for children receiving special education services

7. Certification and licensing requirements

8. The structure and organization of typical public school programs
9. How special education is funded including Medicaid reimbursement for school services

10. The incidence and prevalence of communication disorders

11. How educational curriculum is defined and developed

12. The relationship between language, learning and literacy

13. How phonological development impacts reading

14. The role of school pre-referral teams in the identification of children with disabilities

15. Assessment guidelines and regulations

16. Definitions for communication disorders, delays, and differences

17. Eligibility criteria for school services including the disorder categories covered by IDEA

18. Differences between an IFSP and IEP

19. Timelines for development and review of IFSP and IEP documents

20. Various service delivery options available in education model including:
   • Monitor
   • Collaborative consultation
   • Classroom-based
   • Pull-out
   • Self-contained program
   • Community based
   • Combination

21. The role of the SLP in providing services to children with limited English proficiency

22. Factors that will impact delivery of services to Culturally/Linguistically Diverse (CLD) students

23. Criteria used to determine when a student no longer qualifies for special education speech-language services

24. The role of the SLP in supervision of individuals working with students on an IFSP/IEP including:
   • General education paraeducators
   • Speech-language pathology assistants
   • Speech-language pathology aides

25. Responsibilities in reporting suspected neglect/abuse

**Skill Outcomes**

**The student will learn:**
1. How to organize and carry-out speech-language screenings

2. How to complete a prior notification document as part of educational case management

3. How to develop and write an assessment plan
4. How to use a variety of assessment methods including:
   - Parent/staff/student interviews
   - Checklists and developmental scales
   - Curriculum-based tasks
   - Dynamic assessment
   - Portfolio/work sample assessment
   - Observation and anecdotal records
   - Standardized protocols

5. How to write an integrated assessment report

6. How to write an IEP including:
   - Documenting strengths and weaknesses in the present level of performance
   - Curriculum-based goals and objectives
   - Projected date, frequency, and duration of services
   - Accommodations
   - Characteristics of service
   - Outcome documentation
   - Transition information
   - Justification for least restrictive environment
   - Justification for extended school year

7. How to schedule students for services in a school setting: pre-school, elementary, middle and high school

8. How to document outcomes in an IFSP/IEP progress note

9. How to complete a dismissal or termination of services form

CSD-422: NEUROANATOMY FOR COMMUNICATION DISORDERS

Instructor: S. Amebu Seddoh

Knowledge and Skill Outcomes

Note: Outcomes for each topic on this page (1-5) meet ASHA Standard III-A, Basic Sciences).

1. **Terminology and historical overview** (chap. 1)

   *Be able to demonstrate knowledge of (a) terms used for neuroanatomical descriptions; (b) the contributions of early scholars to the understanding of neuroscience.*

2. Gross Anatomy of the Nervous System (chap. 1)

   *Be able to demonstrate knowledge of the major divisions of the nervous system and their functions.*

3. **The brain** (chap. 2, 3, 6, 18)

   *Be able to identify gross structures of the brain including (but not limited to) the cerebral hemispheres,*
the meninges, hind brain, brain stem, diencephalon, ventricular system, and the cerebellum.

4. **Cell Types in the Nervous System** (chap. 5)

Be able (a) to differentiate between neurons and neuroglial cells; (b) to explain basic neuron morphology (cell body, dendrite, axon), as well as types, functions, and locations of neuroglial cells in the CNS.

5. **Synapse and Impulse Transmission** (chap. 5).

Be able to explain the basic physiology of action potential and impulse transmission (ASHA Standard III-A, Basic Sciences).

6. **Cellular Organization of the Brain (Cytoarchitecture)** (chap. 1)

Be able to use Brodmann’s numbers to identify brain structures.

7. **Fiber Tracts of the Nervous System** (chap. 2)

Be able to demonstrate knowledge of the functional anatomy of projection, commissural and association fibers (ASHA Standard III-A, Basic Sciences).

8. **Vascular System** (chap. 17)

Be able (a) to demonstrate knowledge of the anatomy of the arterial blood supply system of the brain; (b) to identify arteries including (but not limited to) Circle of Willis, middle cerebral artery, anterior cerebral artery, basilar artery. (ASHA Standard III-A, Basic Sciences).

9. **The spinal cord** (chap. 2, 3, 7, 11)

Be able to demonstrate knowledge of the gross anatomy of the spinal cord with special reference to its segments/divisions and internal organization (ASHA Standard III-A, Basic Sciences).

10. **Peripheral Nervous System (PNS)** (chap. 15)

Be able (a) to demonstrate knowledge of the anatomical components of the peripheral nervous system; (b) to identify each cranial nerve by name and number and associate it with its functions; (c) to assess cranial nerve function; (d) demonstrate knowledge about the role of the PNS in movement in general and in speech production in particular. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

11. **Pyramidal System: The Two Neuron Concept** (chap. 11, 14)

Be able to distinguish between upper and lower motor neuron syndromes (ASHA Standard III-A, Basic Sciences; ASHA Standard III-C, Anatomical correlates of speech/language).

12. **The Basal Ganglia** (chap. 13)
Be able to demonstrate knowledge of the gross anatomy of the basal ganglia and its components (ASHA Standard III-A, Basic Sciences).

13. Higher Mental Functions (chap. 19)

Be able to demonstrate basic knowledge of language representation in the human brain, (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication).

Remediation
A failure to make the minimum mean score will require remedial (additional) work in order to meet the requirements of ASHA certification. Remedial work will include a comprehensive review of the topics treated followed by an oral and/or written (comprehensive) examination.

CSD 425: Language, Multiculturalism and Communication Disorders

Instructor: Manish K. Rami

Office Hours: Drop in anytime you have any questions or email/call me for an appointment.

Introduction: This course is an opportunity to learn about culture, language, and how the two interact. (ASHA Standard III-B) We will place an emphasis on the interaction of language and culture in cases with communication disorders. (ASHA Standard III-B, III-D)

With reference to culture, we will consider questions such as: What is culture? How do we become aware of our culture? How can we learn and understand other cultures and other worldviews? Does one culture influence another? And so on. We will examine several cultures including the African Americans, Asians and Pacific Americans, Middle Easterners and Arab, Native Americans, Latinos (and of course, your own culture.) We will look at the similarities and differences among these cultures. We will also learn about race, ethnicity, and cultural identity as well as the implications for people at large and especially for speech-language pathologists when race and ethnicity interact. With reference to language, we will consider questions about language, such as: What is language and what is its structure? What are some factors that influence the structure and the use of a language? How the use of a language may influence its structure? And so on. Then we will turn to questions such as: How do the culture and a language interact? Is the interaction of culture and language limiting or expanding of one’s world experience? (ASHA Standard III-B, III-C) Finally, we will look at questions such as: What are the various cultural views of the many communication disorders? How do these varying cultural views of communication disorders influence the processes of assessment and treatment of those disorders in cases from those cultures? What skills do we need to develop to deal with this situation and how do we go about developing these skills? These questions are all interesting and intriguing. This course will attempt to expand your worldview and introduce you to the practice of speech-language pathology from a multicultural perspective. (ASHA Standard III-D)

Objective: The primary objectives of this course are to study language structure as a function of the worldview of a culture and to learn to apply this knowledge to clinical practice in speech-language pathology.
**Essential Studies goal:** This course is validated in the category of Social Sciences for the ES goal of Diversity. It is validated with ES special emphasis on Global Diversity (G). This course will help you understand social and cultural diversity along with the various concepts outlined in the introduction above. This course will ask you to think deeply about your culture and other cultures. Additionally, this course will engage you in a project intended to help you analyze several cultures and the cultural norms, values, and beliefs within each culture. This course will also focus on applying the culture specific knowledge to clinical situation. The cultural awareness and the knowledge of other cultures may improve your ability to work with socially and culturally diverse clients. Part of the course assessment will involve understanding and knowledge of global diversity.

**Required Textbook:**

**Required Readings:**
Herbert, G. (1975). The Pulley. In C. A. Patrides (Ed.), *The English poems of George Herbert* (p. 166). Totowa, N. J., Rowman and Littlefield. (Note: A few other books about Herbert’s poems also have this poem in them.)


**Recommended Readings:**

**To be successful in this course:** You must read, understand, and reflect upon the content of the textbook, readings, and the material covered in class. To do this well, schedule regular study times. After your reading, you must answer the study questions provided. On reflection, you should be able to make an entry in the term paper. Also, feel free to ask and answer questions and participate in class discussions. Talk with your family members, friends, roommates, and others about some of the ideas we explore in our class. Reflections on these conversations may also be recorded in the term paper. Finally, consider learning a few phrases in a language that you have never learnt before. Try 3 – 5 languages. Try eating different types of food (and use your hands and chopsticks to eat.) These are all valuable experiential learning tools.

**Disability/access statement:** If you have emergency medical information to share with me, if you need special arrangements in case the building must be evacuated, or if you need accommodations in this course because of a disability, please make an appointment with me. My office location and hours are as above. If you plan to request disability accommodations, you are expected to register with the Disability Support Services (DSS) office (190 McCannel Hall, 777-3425 v/tty, dss@und.edu).

**Scholastic dishonesty:** Please take special note of Section IIIa-3 on Scholastic Dishonesty in the Code of Student Life. (Available at: http://sos.und.edu/csl). Matters of scholastic dishonesty will be treated as a scholastic matter.

**Grading Policy, Test, Assignments, and Deadlines:** All assignments will be due as announced. Assignments may be submitted in advance but never late. Late assignments will not be graded, will be assigned a score of zero points. Late or missed assignments cannot be made up.

Letter grade will be assigned as follows:
A = 91 - 100 %, B = 81 - 90.99 %, C = 71 - 80.99 %, D = 61 - 70.99 %, F = < 60 %

**Determination of the course grade:** 75% of the grade will be based on 3 (three) tests, 15% of the grade will be based on homework and 10% of the grade will be based on a term paper:

**Test One:** An examination of cultural diversity. The content of this test will require you have a clear understanding of multiculturalism, various cultures including African American, Asian and Pacific American, Middle Eastern and Arab, Native Americans, and Latino. (See chapters 1 -6 of the text) and assigned readings. On October 6, 2011 (Worth 25%)

**Test Two:** The effect of culture and language on communication disorders. The content of this test will require you to have a clear understanding of the various cultural perspectives of several speech, language, and hearing disorders. (See chapters 7 – 12 of the text) and assigned readings. On November 3, 2011 (Worth 25%) (ASHA Standard III-C)
Test Three: Clinical issues in clients from diverse cultural and language background. This test will require you to know how to apply the content of Tests one and two in various clinical situation in the practice of speech-language pathology and audiology (See Chapter 13 -15 and assigned readings) On December 8, 2011 (Worth 25%) (ASHA Standard III-D)

The test dates are tentative and subject to change. The tests will consist of multiple choices, true or false, fill in the blanks, match the columns, and short answers etc. All questions for the tests shall be from the textbook, material covered in class, and assigned readings. Tests will not be administered for individuals after it has been administered in class. If you miss a test, you may make up the points by doing an extra credit assignment to be completed within one week after the missed test date. However, the makeup assignment cannot earn more than the class average for that test.

15% of your grade will be based on homework. A list of study questions will be provided to you each week (see the course Blackboard site). You will need to study the relevant material and answer the questions provided. You must turn in typed up answers to the study questions each week. Late homework will not be graded, cannot be made up, and will be assigned no score. Turn in the answers to all the questions for each chapter of the text as well as the additional assigned readings.

10% of the grade will be based on a term paper. The paper will document your reflections of your own, various other cultures, and the effect of the cultural and linguistic diversity on service delivery. It is suggested that you start this paper immediately after the first day of class. Then keep adding entries or brief notes each week. Add additional entries after each reading, and with each in-class exercise. Your entries could be topical or chronological. I will be happy to read one draft and make comments for improving the paper. I very highly recommend that you seek help from the Writing Center at 12 Merrifield Hall. I urge you call them at 777-2795 and set up an appointment. This grade cannot be made up. If the assignment is turned in late, it will not be graded and you will be assigned a score of zero. Grading will depend on the following: Quality of narrative (clear presentation of arguments.), Readability (top-down organization, good use of headings, clear and complete sentences with no awkward phrasing or confusing passages.), and Spellings and grammar. The paper will be due on the last day of class, December 08, 2011.

Finally, you will create a resource binder. More about this assignment in class.

Tentative Course Meeting Schedule

Our class discussion will proceed roughly in line with the following and similar questions.

What is culture? How is it produced? How does one examine it via language? What is the Sapir-Whorf hypothesis? Does an outside culture or language influence another culture or language? (Read Duranti, 1997, Theories of culture, and Linguistic diversity, and Whorf, 1940.) (ASHA Standard III-B)

What is ethnicity? What is race? How is ethnicity different from race? How and when do race and ethnicity interact and what are the consequences of such an interaction? What are the various aspects of a culture? We will examine multiple aspects such as the beliefs and religious views, orientation to time and nature, views on family structures, the roles of men and women in the society, personal names, health and food, education, music, poetry and more specifically, the language and its various features, verbal and non-verbal communication styles, perceived causes of disorders etc. (Read Boas, 1995, and Hymes, 1964, chapters 1-6 of the textbook.) (ASHA Standard III-B)
What kinds of disorders are prevalent in which race and what are the normal cultural or ethnic views about the disorders in the respective cultures? What are the problems a speech-language pathologist faces in service delivery to clients with a diverse background? (Read chapters 7-12 of the textbook and various articles.) (ASHA Standard III-C)

What can an SLP do to ensure that the culture and the language of the client do not negatively affect the service delivery including the processes of evaluation and intervention? And so on. (Read chapters 13-15 of the textbook.) (ASHA Standard III-D)

CSD 484: CLINICAL PRACTICUM

Instructor: Peggy Biberdorf, M.S., CCC-SLP

The following KNOWLEDGE OUTCOMES will be achieved:

- To provide students with an overview of the range and scope of communication disorders and differences with reference to age, disorder, severity and cultural/ethnic background.

- To provide students the opportunity to become familiar with procedures, forms and policies printed in the Departmental Handbook written by the faculty within the Department of Communication Sciences and Disorders.

- To provide students with an overview of case management skills necessary for planning and implementing intervention.

- To provide students with a framework for observation, with systematic methods for gathering, recording, analyzing and reporting data.

- To provide students with introductory information about the American Speech-Language-Hearing Association.

Method of Student Evaluation
Your grade will be based on attendance at clinical sessions and on your journal.

CSD 485: CLINICAL PRACTICUM II

Instructor: Peggy Biberdorf, M.S., CCC-SLP

Course Goals and Knowledge Outcomes

- To provide students with an overview of the range and scope of communication disorders and differences with reference to age, disorder, severity and cultural/ethnic background in order plan and implement assessment and intervention. Your role as a co-clinician will include supervision as you are involved in live clinical sessions.

- To provide students the opportunity to become familiar with procedures, forms and policies printed in the Departmental Handbook written by the faculty within the
The student clinician will demonstrate knowledge of the Code of Ethics as issued by the American Speech-Language and Hearing Association. (Standard III-E)

The student will demonstrate knowledge of professional issues.  (Standard III-G)

The student will develop skills in written and oral forms of communication sufficient for entry into professional practice.  (Standard IV-B)

The student will obtain 25 observational clock hours of supervised clinical experience.  (Standard IV-C)  Failure to complete the required observational hours may disqualify the student from future clinical practica.

Students who successfully complete CSD 485 will have acquired entry level skills concerning:

1. Clinical processes relating to communication sciences and disorders
2. Case specific principles and techniques of intervention
3. An introduction to a variety of instructional methods
4. Ability to plan individualized treatment programs and administer therapeutic lessons
5. Ability to gather data and maintain records
6. To aid in the preparation of various reports, correspondence and activities
7. Ability to effectively communicate with others
8. Maintaining favorable public relations

Behavioral Objectives

- The student clinician will read and maintain familiarity with the ASHA Code of Ethics as demonstrated by participation in clinical seminars and assignments.

- The student clinician will perform at expected levels in clinical seminars via assignments (e.g., HIPPA, risk management, billing, certification, licensure, etc.) as demonstrated by attendance and participation during Clinical Affairs meetings.

- The student will maintain their Log of Observation Hours and write journal entries for each participation session for the case supervisor and complete a summative journal entry for the course instructor.

- The student will consistently use standard English conventions in oral and written communication skills as judged by the case clinician/supervisor.  Evidence of entry skills may be assessed in the following areas:
  - File reviews
  - Planning
  - Conferences with case clinician and/or supervisor
  - Lesson plans/Treatment Plans/Progress Reports
  - Session evaluation
  - Data collection
  - Chart notes
  - Communication with other professionals/client/family or significant others/case clinician/supervisor and other personnel involved in client care

Opportunities for Remediation
A student whose performance is not as expected, may receive a grade deficiency at midterm. Clinical privileges may be lowered to probationary status or be terminated. A remediation plan may be developed by the case supervisor in consultation with the clinic coordinator to foster satisfactory ratings via make-up or new assignments. Additionally, the student’s grade may be lowered. Failure to remediate as evidenced by not achieving and maintaining satisfactory performance as outlined in the plan, may result in termination of clinical privileges.

**CSD 525: Introduction to Research in Communication Sciences and Disorders**  
Manish K. Rami, Ph.D.

**Knowledge outcomes and assessment.**

The student will understand and be able to list and describe the attributes of a good researcher.
The student will be able to understand and explain the types of explanations (of observed phenomenon.)
The student will understand and be able to describe the methods of inquiry with examples.
The student will be understand and be able to describe and differentiate between methods of reasoning.
The student will understand and be able to explain what theories are?
The student will understand and be able to explain the concept of deductive testing of theories.
The student will understand and be able to explain the role of falsification of hypothesis.
The student will understand and be able to describe the development of research paradigms and of knowledge.
The student will understand and be able to explain the following: Qualitative research, Descriptive studies, Experimental studies, Correlational studies, and Causal comparative studies.
The student will understand and be able to outline issues concerning use of human subjects and be familiar with the IRB process.
The student will successfully complete the online IRB training offered by RDC, UND.)
The student will understand and be able to explain the concept of various types of sampling using examples.
The student will understand and be able to explain the process of planning an experimental study.

**Skills outcomes**

The student will be able to generate a simple hypothesis, when given two variables.
The student will be able to conduct an online search for relevant literature using various search engines and databases.
The student will be able to devise a simple experimental design using two variables.
The student will be able to plan how to execute an experimental study.
The student will be able to determine how to analyze data and perform appropriate statistical tests for a given data set.
The student will also be able to interpret data using graphs, descriptives, and inferential statistical test results.
The student will be able to design SSD from case studies.
The student will be able to assess the utility of research in clinical applications.
Assessment of knowledge and skills

The student’s skill will be assessed using paper and pencil tests. Students will demonstrate mastery over the knowledge regarding ethical conduct in research by successfully completing the IRB training. Additionally, each student will also demonstrate ability to critically evaluate individual sections of an experimental article during class exercises, by submitting a written evaluation of an experimental paper and making an oral presentation of it, by conducting a review of literature and submitting a written research prospectus and making oral presentation.

Remediation

Opportunity to retake certain or all modules of the IRB training in case a student fails them exists via the RDC. Students who fail a paper and pencil test will be allowed to read the course material again and have opportunity to ask questions before taking make up tests that will be made available. Student’s progress on the comprehensive assignment will be reviewed every four weeks and they will be provided with written feedback to improve upon their assignments until the assignment is completed satisfactorily.

CSD 536: Seminar on Stuttering
Manish K. Rami, Ph.D.

(The following knowledge goals and skills and its assessments meet the new ASHA standards III-B, III-D, & III-F.)

1. The student will be able to describe the difficulties in defining stuttering with respect to frequency and types of stuttering.

2. The student will be able to describe the five dimensions of fluency: continuity, rate, duration, coarticulation and, effort.

Knowledge Assessment: Students will explain the difficulties in defining stuttering and define the dimensions of fluency in a paper and pencil test.

Skill Assessment: Students will demonstrate the effect of the dimensions on fluency on normal speech by using pseudostuttering.

3. The student will be able to describe, identify, and measure the primary characteristics of stuttering in five ways: frequency of stuttering, mean duration of stuttering, frequency of specified disfluency types, speech rate; and ratings of severity.

4. The student will be able to describe, and identify the secondary characteristics of stuttering as observed in the motoric movements of head, face, limbs, and torso.

5. The student will be able to explain and identify the avoidance behaviors of postponement, starters, retrials, revisions, substitution, circumlocutions, mutism, and poor eye contact used by clients.

Knowledge Assessment: The student will view and analyze at least three speech samples on video tapes of people who stutter or of pseudostuttering acts by normals.
**Skill Assessment:** The student will be able to identify and count stuttering moments in speech, classify types of dysfluencies, measure speech rate, and rate severity of stuttering and describe the secondary behavior from audiovisual samples with 90% accuracy.

6. The student will be able to state the incidence and prevalence of the disorder/s.

7. The student will be able to explain the development of stuttering in terms of alpha, beta, delta, and gamma behaviors.

8. The student will be able to explain factors influencing the development of stuttering: age, gender, genetics, speech and language development, and brain injury.

9. The student will be able to list the factors contributing to the development and maintenance of stuttering (viz. Interrupting, time pressure, perfectionistic standards, and lack of attention) and to explain how to manipulate them.

10. The student will be able to discuss these theories of stuttering: Diagnosogenic, Demands and capacities, and Covert repair hypothesis.

**Knowledge Assessment:** The student will be able to list the factors and explain with examples in a paper and pencil test. Student will be able to point out the merits and demerits of each of the theories of stuttering and discuss its role in clinical applications in a short written essay form.

11. The student will be able to obtain a reliable case history via an interview of the client and/or parent/s/guardian/s of client, and information from other professionals.

12. The student will be able to collect representative speech samples in various situations (For ex. in clinic, home, classroom, playground, work environment, and other places important for client.)

13. The student will be able to administer tests for measuring severity (Stuttering severity instrument-3) and surveys feelings and attitude towards speech (Perception of self, S-24 Erikson scale, Children’s attitude toward talking,) analyze data, and interpret results.

14. The student will be able to conduct stimulability testing using the following techniques: Speaking in a nonhabitual manner (changing speaking rate, pitch, whispering, simulating accents, changing intonations, singsong manner, prolonged speech) choral reading, shadowing, using a metronome, delayed auditory feedback, and frequency altered feedback.

**Skill Assessment:** The student will demonstrate their abilities to obtain case history information in a pretend interview and the student will show how to administer, analyze, and interpret tests in a mock testing session. The student will submit a case report of the exercise.

15. The student will be able to describe the fluency shaping treatment procedures: slowed speech rate, easy vocal onset, blending, and light articulatory contacts.

16. The student will be able to describe the fluency modification treatment procedures: cancellation, pull-out, preparatory set, and pseudostuttering.

17. The student will be able to outline how to reduce speech associated excitement by counseling parents to speak slowly, to use simple language, to interrupt less often, and ask fewer questions requiring long complex answers.
Knowledge Assessment: The student will describe the fluency shaping and modification procedures in a paper and pencil test.

Skill Assessment: The student will demonstrate the fluency shaping and modification procedures in their speech.

18. The student will be able to help the client how to generalize and maintain fluent speech by varying speech within the clinical setting, practicing in a structured situations, and use of self-help and support groups (NSA, SFA.)

Knowledge Assessment: The student will create a list of self-help and support resources and document information on how to get in touch with these resources and how to participate and take advantage of it.

CSD 538: Management of Phonatory Disorders

Instructor: Shari Weisz

MODULE I – ANATOMY AND PHYSIOLOGY OF RESPIRATION, PHONATION, AND RESONATION INVOLVED IN VOICE PRODUCTION (STD. III B)

1. THE STUDENT WILL BE ABLE TO ACCURATELY IDENTIFY AND LABEL ANATOMICAL STRUCTURES THAT MAKE UP THE VOICE PRODUCTION MECHANISM, INCLUDING, CARTILAGES, BONES, MUSCLES

2. THE STUDENT WILL BE ABLE TO ACCURATELY NAME AND OUTLINE THE NEUROLOGICAL INNERVATION OF THE LARYNX.

3. THE STUDENT WILL BE ABLE TO ACCURATELY DESCRIBE THE KINEMATICS OF THE LARYNGEAL MECHANISM DURING VOICE PRODUCTION, INCLUDING MOVEMENTS OF THE LARYNX DURING VOICING AND RELATE THESE TO THE MYOELASTICAERODYNAMIC THEORY OF VOICE PRODUCTION.

4. THE STUDENT WILL BE ABLE TO ACCURATELY IDENTIFY AND DESCRIBE THE RESPIRATORY STRUCTURES IMPORTANT FOR VOICE PRODUCTION.

5. THE STUDENT WILL BE ABLE TO ACCURATELY DESCRIBE THE KINEMATICS OF THE RESPIRATORY SYSTEM DURING VOICE PRODUCTION.

6. THE STUDENT WILL BE ABLE TO ACCURATELY OUTLINE THE RESPIRATORY LUNG VOLUMES IMPORTANT TO VOICE PRODUCTION.

7. THE STUDENT WILL BE ABLE TO ACCURATELY DESCRIBE THE AIRFLOW DYNAMICS ASSOCIATED WITH VOICE PRODUCTION.

MODULE II – ACOUSTIC, AERODYNAMIC AND PERCEPTUAL PARAMETERS OF VOICE IN MALE AND FEMALES, CHILDREN AND ADULTS (STD. III B)

8. THE STUDENT CAN ACCURATELY DESCRIBE THE AERODYNAMIC PRINCIPLES OF
VOICE PRODUCTION AND DISCUSS THE AERODYNAMIC MYOELASTIC THEORY OF VOICE PRODUCTION.

9. **The student can accurately outline and describe the acoustic properties of the voice including:**

10. **The student can accurately explain the relationship between acoustic and perceptual properties of the voice**
    a. Pitch – frequency
    b. Loudness – intensity
    c. Quality – frequency, intensity, resonance, perturbations, S/N ratio
    d. Inflection – frequency range, intensity
    e. Resonance – formant energy and distribution

11. **The student can accurately discuss the relationship between electroglottograph measurements and acoustic and perceptual properties of the voice.**

12. **The student can accurately define and compare the acoustic properties of the “normal” voice in children, adolescents, adults, and geriatric speakers, male and female**

**Module III – Etiologies of Voice Disorders – Medical, Hyperfunctional, and Psychogenic in males and females, adults and children (Std. III-C3)**

13. **The student can accurately list and discuss the etiologies of functional voice disorders in males, females, children, adolescents, and adults**

14. **The student can accurately list and discuss the etiologies of medical voice disorders in males, females, children, adolescents, and adults**

15. **The student can accurately describe the relationship between acoustic and perceptual characteristics and clinical designators of voice disorders in males, females, children, adolescents, and adults with hyperfunctional or organic voice disorders.**

**Module IV – Assessment of Voice Disorders – Perceptual, Acoustic, Aerodynamic, Endoscopic, Electroglottograph (Std. III-B; III-D3; III-D9; III-E; III-F; III-G; IV-G)**

16. **The student can accurately outline and explain the case history and intake information important to successful assessment, diagnosis, intervention, and/or referral for voice disorders in males, females, children, adolescents, and adults**

17. **The student can accurately outline and defend the clinical procedure to follow in the execution of a voice evaluation, including perceptual and instrumental assessments for males, females, children, adolescents, and adults**

18. **The student can examine and accurately interpret data gathered during the**
ASSESSMENT OF A VOICE DISORDER PATIENT.

**Module V – Intervention for Voice Disorders – Medical, Hyperfunctional, Adult and Child (Std. III-D 3; III-E; III-F; IV-B; IV-G 1,2,3)**

19. Interpreting, integrating, and analyzing the data collected from the case history and the assessments, the student can write, and provide a rationale for intervention goals for male, female, child, adolescent, and adult patients with a functional or medical voice disorder using evidence based practice data.

20. Interpreting and integrating all available patient data, the student can list, describe, and provide examples of therapy techniques for the specific patients being considered for treatment, using evidenced based practice data to support therapy examples.

21. Analyzing data collected during therapy, the student can illustrate the patient’s progress or lack of progress, and describe any changes that might be needed in intervention.

22. Analyzing patient data gathered during therapy, and comparing the patient’s pre and post therapy data, the student can make appropriate recommendations regarding dismissal from therapy or referral for further assessment/treatment.

23. Analyzing patient data gathered during therapy, and comparing the patient’s pre and post therapy data, the student can make appropriate recommendations to help the patient maintain good vocal hygiene and the “good” voice after therapy, including home programming.

**Module VI – Spasmodic Dysphonia: Identification, Diagnosis, and Treatment (Std. III-D 3; III-E; III-F; IV-B; IV-G 1,2,3)**

24. The student can accurately describe the clinical signs of spasmodic dysphonia, including onset and progression of symptoms, gender and age factors, patient description of the problem, perceptual and acoustic characteristics of spasmodic dysphonia, history of traditional voice therapy, and prognosis.

25. The student can accurately discuss the current understanding of the etiology of spasmodic dysphonia based on current research findings.

26. The student can accurately describe the diagnostic procedures appropriate for suspected cases of spasmodic dysphonia, including perceptual and instrumental assessments.

27. The student can accurately describe the current best practice plans for the treatment of spasmodic dysphonia and the role of the speech-language pathologist in that treatment plan.

28. The student can outline a home therapy program for a typical patient who has received treatment for spasmodic dysphonia.

**Module VII – Laryngeal Cancer (Std. III-D 3; III-E; III-F; IV-B; IV-G 1,2,3)**

29. The student can accurately describe the types of laryngeal cancer that can potentially influence voice production.
30. The student can accurately describe the clinical signs of laryngeal cancer, including perceptual and acoustic characteristics of the voice, direct laryngoscopy findings, patient description of the problem, and pertinent case history data.

31. The student can accurately discuss the current understanding of the etiology of laryngeal cancer based on current research findings.

32. The student can accurately describe and demonstrate the diagnostic procedures appropriate for suspected cases of laryngeal cancer, including perceptual and instrumental assessments.

33. The student can accurately describe the current best practice plans for the treatment of laryngeal cancer and the role of the speech-language pathologist in that treatment plan.

34. The student can accurately compare and contrast the voice restoration therapies available to the laryngeal cancer patient, including the total, hemi, and partial laryngectomy, and choose the best therapy for a specific patient and explain why it is the best based on evidenced-based practice data.

CSD 542: Neurogenic Communication Disorders II – Child Neurogenics

Instructor: Sarah Robinson, Ph.D.

Module I. Neurosubstrate for Speech and Language (Std. III-B; III-C)

1. The student will be able to describe the cerebral cortex centers that are important to speech and language initiation and control.
2. The student will be able to identify those areas of the brain that initiate motor movement vs. those areas of the brain the control motor movement.
3. The student will be able to describe the role of sensory input to the normal control of speech movements.
4. The student will be able to describe the subcortical structures important to speech motor movements.
5. The student will be able to identify and compare and contrast upper motor neurons from lower motor neurons.
6. The student will be able to identify and compare and contrast upper motor neuron lesions from lower motor neuron lesions.
7. The student can describe the various stages of brain development and the time frame for this development.
8. The student can describe the development of myelination in the brain and its influence on sensory and motor development.
9. The student can describe reflex development and inhibition in an infant and its impact on normal motor development.
10. The student can discuss the significance of experiences and practice to the normal development of motor skills, including speech.

Module II. The Child with Brain Damage (Std. III-C; III-D; IV-B; IV-G)

11. The student can identify causes of congenital and acquired brain damage in children.
12. The student can discuss the relationship between congenital and acquired brain damage and cognitive, social, language, and speech development in each.
Module III. Cerebral Palsy (C.P.) (Std. III-C; Std. III-D)

13. The student can identify the types of CP and the clinical signs of each one.
14. The student can identify causes of CP and the relationship between site of lesion and type of CP.

Module IV. Traumatic Brain Injury (TBI) (Std. III-C; Std. III-D)

15. The student can describe the various potential causes of TBI.
16. The student can describe the relationship between the child’s age and cause of TBI.
17. The student can discuss the cognitive, sensory, speech, language, and educational problems associated with TBI.
18. The student can describe the speech and language problems associated with TBI and their relationship to cognitive, sensory and psychosocial factors.

Module VIII. Evaluation and Diagnosis Considerations for the Child With Brain Damage – C.P. and TBI (Std. III-C; Std. III-D)

19. The student can compare and contrast the “formal” speech and language evaluation from the “modified” evaluation.
20. The student can describe when is the appropriate time to use the “formal” evaluation as compared to the “modified” evaluation.
21. The student can discuss the team approach to the evaluation of the brain damaged child and identify the members of the team their role in the evaluation process.

Module IX. Management of the brain damaged child- C.P. and TBI (Std. III-C; Std. III-D)

22. The student can identify appropriate therapy goals and outcomes for children with brain damage.
23. The student can describe intervention strategies for children of various ages with brain damage.
24. The student can discuss the role of the speech-language pathologist in integrating the child with brain damage back into the school and community setting.

Module V. Developmental Apraxia of Speech (DAOS) (Std. III-C; Std. III-D)

25. The student can describe the suspected causes of developmental apraxia of speech (DAOS).
26. The student can describe the clinical signs associated with DAOS.
27. The student can compare and contrast phonological and articulation disorders with symptoms of DAOS.
28. The student can describe the tests and assessment procedures that might be used with children with suspected DAOS.
29. The student can identify those diagnostics signs thought to be important in the diagnosis of DAOS.
30. The student can outline various treatment strategies for DAOS and discuss the clinical successes of the various treatment programs.

Module VI. Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effect (FAE) (Std. III-C; Std. III-D)

31. The student can describe the cause of Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effect (FAE).
32. The student can describe the diagnostic clinical signs most often used in identifying FAS/FAE.
33. The student can identify the speech and language problems most often found in children with FAS/FAE.
34. The student can describe an assessment protocol appropriate for a child with FAS/FAE.
35. The student can outline various treatment strategies for FAS/FAE and the role of the speech-language pathologist.

Module VII. Fragile-X Syndrome (Std. III-C; Std. III-D)

36. The student can describe the suspected causes of Fragile-X syndrome
37. The student can describe the clinical signs associated with Fragile-X syndrome.
38. The student can describe the tests and assessment procedures that might be used with children suspected of Fragile-X syndrome.
39. The student can identify those diagnostics signs thought to be important in the diagnosis of children with Fragile-X syndrome.
40. The student can outline various treatment strategies for children with a diagnosis of Fragile-X syndrome and discuss the clinical successes of the various treatment programs.

Assessment: Each student will be assessed at the end of each module to determine how well she/he has acquired each of the outcomes identified. The ASHA requires that formative assessments be used to measure student’s learning throughout a course of study. Formative assessment is an ongoing measurement of the knowledge and skills being acquired by students throughout the duration of this course, and is done to assure that students are acquiring the appropriate academic and clinical competencies expected for this area of study. The assessment may use one or more of the following to determine each student’s competencies: paper and pencil tests; laboratory exercises; 2-page papers; and/or written analysis, descriptions, and treatment plans for mock patient data. Where appropriate, textbooks, Journal articles, study guides, illustrations, videotapes, and fellow class members may be used in these assessment procedures. Each student is expected to demonstrate at least 80% accuracy on the knowledge and skills assessed in each module. If any student fails to achieve the 80% criterion level on each module exam, a second examination will be required. Study guides and reading assignments appropriate for the area to be tested will be provided to help the student prepare for the second examination. The second examination may be a paper and pencil test, a paper, a case study, or a laboratory demonstration. The second test must be completed within two weeks following the initial examination. The ASHA standard met by successfully completing the competencies stated in each of the modules is identified.
CSD 542: Neurogenic Communication Disorders II

Instructor: Sarah Robinson, Ph.D.

Module I - Introduction and Overview of Augmentative Communication (Std. III-C)

1. The student will be able to identify etiologic conditions that might require use of an AAC system or device.
2. The student will be able to define the terminology important in the study and application of AAC technology to the communicatively impaired individual.

Module II - Communication Systems and Their Components (Std. III-C; III-D: IV-G)

3. The student will be able to compare and contrast the symbols that can be used in AAC systems.
4. The student will be able to differentiate between direct selection and scanning procedures in AAC devices and discuss when to use each.
5. The student will be able to differentiate between static and dynamic displays in AAC devices and when to use each.
6. The student will be able to describe examples of high and low tech AAC systems and when each one might be used and explain why.
7. The student will be able to differentiate between aided and unaided AAC intervention.

Module III - Principles of Assessment and Phases of Assessment (Std. III-C; III-D: IV-G)

8. The student will be able to discuss the various assessment models and determine which one is most appropriate for the potential AAC user being evaluated.
9. The student will be able to describe and outline the appropriate assessment for an individual (child or adult) with developmental disorders who may be a potential AAC user.
10. The student will be able to describe and outline the appropriate assessment for an individual (child or adult) with acquired disorders who may be a potential AAC user.
11. The student will be able to discuss the importance of consensus building in making decisions about AAC use and the AAC user.

Module IV - Participation Patterns and Communication Needs Assessment (Std. III-C; III-D: IV-G)

12. The student will be able describe participation and access barriers to the successful use of AAC.

Module V - Assessment of Specific Capabilities (Std. III-C; III-D: IV-G)

13. The student will be able to describe the neuroanatomical and physiological factors important in doing an evaluation for the potential AAC user.
14. The student will be able to discuss those psychological and social factors important in the assessment and intervention strategies for the potential AAC user.
15. The student will be able to describe the assessment of cognitive and linguistic capabilities in the potential AAC user. The student will be able to compare and contrast maximal, criteria-based, and predictive assessment procedures for the potential AAC user.

Module VI - Principles of Decision Making and Intervention (Std. III-C; III-D: IV-G)
Module VII - Measuring and Evaluating Intervention Outcomes (Std. III-C; III-D: IV-G)
16. The student will be able to identify and measure appropriate outcome data to determine effectiveness of AAC intervention strategies.

Module VIII - AAC Intervention – Strategies, Populations, and Outcomes

Module IX - AAC for Beginning Communicators – opportunities and non-symbolic communication (Std. III-C; III-D: IV-G)

Module X - AAC for Beginning Communicators- Symbolic approaches to communication (Std. III-C; III-D: IV-G)

17. The student will be able to develop vocabulary and messages appropriate to the potential AAC user’s age and social/educational needs for both symbolic and non-symbolic communication.
19. The student will be able to describe the strategies to use in teaching language to the potential AAC user, both symbolic and non-symbolic.

Module XI- Language Learning and Development in AAC Users (Std. III-C; III-D: IV-G)
18. The student will be able to develop goals, procedures, and teaching strategies used in teaching language structure and use to the AAC user.

Module XII- Intervention to Support Language in AAC Users (Std. III-C; III-D: IV-G)

19. The student will be able to develop goals, procedures, and teaching strategies used in supporting the ongoing use and growth of language for the AAC user.

Module XIII- Building Communicative Competence (Std. III-C;III-D: IV-G)
CSD 552 – Neurogenic Communication Disorders III – Motor Speech Disorders

Instructor: Nicole Kiel

Module I - Neurological Basis of Speech Production and Control (Std. III-B; III-C)

1. The student will be able to outline and describe the anatomical and functional components of the central and peripheral nervous system.
2. The student will be able to identify and describe the motor and sensory components of the central nervous system that are important in the initiation and control of speech.
3. The student will be able to outline and describe the contribution of the pyramidal and extrapyramidal motor pathways to the initiation and control of speech.
4. The student will be able to provide the name and function for the 12 pair of cranial nerves.
5. The student will be able to identify those cranial nerves most important for speech and describe the contribution of each one to speech production and control.
6. The student will be able to outline and describe the contribution of sensory input to the initiation and control of speech.
7. The student will be able to describe the development of the neurological substrate used in the initiation and control of speech.
8. The student will be able to describe the relationship between the development of the neurological substrate important in the initiation and control of speech, and the development of
speech.
9. The student will be able to describe the sensory and motor neurological network required to maintain normal speech.

Module II - Neurological Damage and Speech Production Problems (Std. III-C; IIID; IV-B; IV-G)

10. The student will be able to describe the relationship between the site of lesion in the nervous system and speech motor initiation and control problems.
11. The student will be able to differentiate motor initiation problems from motor control problems.
12. The student will be able to describe the neuromuscular conditions associated with each site of neurological lesion.
13. The student will be able to describe each type of dysarthria and its site of lesion in the nervous system.
14. The student will be able to identify motor speech disorders as belonging to a common class of speech problems and can identify the neurological and perceptual characteristics of each type of dysarthria.

Module III - The Dysarthria Types-Clinical Manifestation And Pathophysiology Of Dysarthria, Re: Darley, Aronson, Brown (Mayo Clinic Classification Of Dysarthria) (Iii-C; Iii-D)

15. The student will be able to identify each type of dysarthria and the describe the perceptual and physiological characteristics of each type as described by Darley, et al

Module IV - Neurological Diseases and Lesions Associated with Motor Speech Disorders (III-C; III-D)

16. The student will be able to describe the etiology, progression, prognosis, and pathophysiology of each neurological disease and insult that can result in dysarthria.
17. The student will be able to describe the site of lesion(s) within the nervous system, the clinical signs, the perceptual characteristics of the speech, and the type of dysarthria associated with each of the diseases and insults identified above.

Module V – Acquired Apraxia (III-C; III-D; IV-B)

18. The student will be able to identify the neurological site of lesion associated with acquired apraxia.
19. The student will be able to describe the pathophysiology of acquired apraxia of speech and relate it to the speech characteristics of apraxia.
20. The student will be able to differentiate apraxia from dysarthria using clinical signs including speech characteristics and neuromuscular behavior.

Module VI - Neurodiagnostics and Dysarthria and Apraxia (III-D; IV-B)

21. The student will be able to describe each of the neurodiagnostic procedures identified above and identify the strengths and weaknesses of each one as a diagnostic imaging technique for identifying site of lesion for dysarthria and/or apraxia.

Module VII. Assessment and intervention strategies for dysarthria and apraxia of speech (III-D;
22. The student will be able to outline a diagnostic procedure (speech, neurological), and provide a rationale for each step or phase of the evaluation, for a patient presenting with symptoms of a motor speech disorder.

23. The student will be able to identify those clinical signs from the mock patient data that are critical to the accurate diagnosis of dysarthria type, apraxia, and dysarthria vs. apraxia and the point of breakdown in the speech production system.

24. The student will be able to provide an accurate diagnosis for dysarthria and/or apraxia based on the assessment data provided from the mock patient data.

25. The student will be able to provide an accurate severity rating and prognosis from the assessment data derived from the mock patient evaluation.

26. The student will be able to outline general speech therapy goals for the patient from whom the assessment data was collected.

27. The student will be able to outline specific speech therapy goals and procedures for each dimension of the patient’s speech that will need intervention.

28. The student will be able to write a diagnostic report appropriate for a medical referral.

29. The student will be able to write a progress report incorporating therapy goals, procedures, and outcome measures used to assess the mock patient’s progress in therapy.

CSD-572 Seminar: Neurogenic Communication Disorders IV

Instructor: S. Amebu Seddoh

Knowledge and Skill Outcomes

**Historical overview of studies of the functions of the right hemisphere**—chap. 1

Be able (a) to identify specific functions of the right hemisphere and provide supporting evidence for them; (b) demonstrate knowledge of the challenges involved in the study and understanding of the disorders associated with right hemisphere damage.  (ASHA Standard III-A, Basic Sciences).

**Neglect**—chap. 2

Be able (a) to explain the nature and manifestations of neglect; (b) to demonstrate knowledge of theories, neural underpinnings and tests of neglect. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Attention deficit**—chap. 3

Be able (a) to explain the nature and types of attentional operations; (b) to demonstrate knowledge of the neural mechanisms underlying attentional operations.  (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Communicative deficits: Prosody**—chap. 4
Be able (a) to define prosody in linguistic, acoustic and perceptual terms; (b) to explain the role of the right hemisphere in processing prosody; (c) describe manifestations of prosodic disturbance following right hemisphere damage. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Communicative deficits: Semantics**—chap. 5

Be able to differentiate between convergent vs. divergent semantic processing and identify specific semantic processing problems exhibited by patients with right hemisphere damage (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Communicative deficits: Discourse**—chap. 6

Be able (a) to define discourse and identify its various types; (b) to demonstrate knowledge of the disorders of discourse processing following right hemisphere damage. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Affective deficits**—chap. 7

Be able (a) to explain the neural mechanisms underlying emotional behavior; (b) to describe emotional processing problems associated with right hemisphere damage (ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

**Assessment**—chap. 8

(a) Demonstrate the ability to identify an appropriate test instrument for individual cases.  
(b) Be able to administer and interpret test results critically in order to arrive at a reliable diagnosis. (ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language; ASHA standard III-D, Principles and methods of assessment; ASHA standard IV-G, Clinical experience).

**Treatment**—chap. 9

Be able (a) to develop appropriate (evidence based) therapy program that has measurable and achievable goals for a patient with right hemisphere damage; (b) to demonstrate ability to measure client’s performance and progress; (c) to provide counseling to clients, caregivers, family members, etc. (ASHA Standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language; ASHA standard IV-G, Clinical experience).

**Remediation**

A minimum mean score of 75 is required to pass the course. A failure to make the minimum mean score will require remedial (additional) work in order to meet the requirements of ASHA certification. Remedial work will include a comprehensive review of course material followed by an oral and/or written (comprehensive) examination.
CSD 583 Evaluation and Service Delivery

(Jointly taught by Mary Jo Schill and another clinic faculty)

**KNOWLEDGE OUTCOMES:** ASHA STANDARDS IV-B, G-I, and G2

**STUDENTS WHO SATISFACTORILY (GRADE C OR ABOVE) COMPLETE THE COURSE CAN EXPECT TO ACHIEVE THE KNOWLEDGE OUTCOMES LISTED BELOW:**

The student will:

- understand diagnosis as a problem-solving process with the goal of recognizing the nature, extent and consequence of communication disorders.

- understand the strengths and weaknesses of formal versus informal approaches, norm referenced versus criterion referenced tests, and a standardized versus ethnographic approach to assessment.

- understand the collaborative, transdisciplinary issues and processes used in diagnosing communication disorders

- have the opportunity to interact with professionals from other agencies regarding the diagnostic process, as can be arranged by the instructors.

**SKILL OUTCOMES**

Students who satisfactorily (grade C or above) can expect to achieve the skills outcomes listed below:

The student will:

- be able to develop an appropriate diagnostic plan for client.
- be able to conduct an interview and to use other tools such as profiles and checklists that are appropriate for the age, education, and cultural background of the client/parent.
- be able to evaluate testing procedures and materials with regard to appropriateness of use with various age, language, and cultural groups.
- be able to evaluate testing procedures and materials with regard to appropriateness of use with various types of disorders.
- be able to differentiate between a communication variation and a disorder including knowledge of characteristics of second-language acquisition as well as nonstandard dialects.
- be able to describe and interpret test results and observations, synthesize case history information with other findings, evaluate etiological and prognostic factors, and make appropriate referrals.
- be able to write a comprehensive diagnostic report that can be read and interpreted by professionals as well as non-professional individuals.
- be able to communicate results and recommendations to clients, parents and professionals and to follow up with the appropriate counseling needed so that the client or others can make appropriate decisions based on the diagnosis.
In order to fulfill requirements for the ASHA Certificate of Clinical Competence (CCC), a record must be maintained showing students’ progress in achieving the knowledge and skills that are expected of all students completing a master’s degree in CSD. An updated copy of the record for each graduate semester completed must be placed in the student’s file by the fourth week of each subsequent semester. A copy of the completed record must be in the student’s file as a requirement for graduation.

**KNOWLEDGE OUTCOMES**

The CSD faculty members will note when a course listed under the various standards has been successfully completed. Successful completion means that the criterion score for achievement for the course has been met. As the student fulfills the coursework requirements for the ASHA standards, these standards will be checked off. For a list of the learning outcomes and assessments, and the standards to which they apply, please refer to the performance outcomes and assessments accompanying the syllabi for each course listed below.

**Standard III-A: The applicant must demonstrate a knowledge of the principles of biological sciences, physical sciences, mathematics, and the social/behavioral sciences.**

Official transcript in student’s file in the CSD office includes at least three semester hours of credit at the college level (non-remedial) in each of the following:

- Biological sciences
  - Course Title: ___________________________ Semester: ________________

- Physical sciences
  - Course Title: ___________________________ Semester: ________________

- Social/behavioral sciences
  - Course Title: ___________________________ Semester: ________________

- Mathematics (including statistics)
  - Course Title: ___________________________ Semester: ________________
Standard III-B. The applicant must demonstrate a knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Specific knowledge must be demonstrated in the following areas:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-B-1: Biological</td>
<td>231 232 235 422</td>
</tr>
<tr>
<td>III-B-2: Neurological</td>
<td>231 232 235 422</td>
</tr>
<tr>
<td>III-B-3: Acoustic</td>
<td>223 232 235 538</td>
</tr>
<tr>
<td>III-B-4: Psychological</td>
<td>232</td>
</tr>
<tr>
<td>III-B-5: Developmental</td>
<td>223 232 333 343</td>
</tr>
<tr>
<td>III-B-6: Linguistic and Cultural</td>
<td>223 232 333 343</td>
</tr>
</tbody>
</table>

Standard III-C. The applicant must demonstrate a knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including their etiologies and characteristics, their anatomical/physiological bases, and their acoustic, psychological, developmental, and linguistic and cultural correlates. Specific knowledge must be demonstrated in the following areas:

III-C-1: Articulation.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-1a: etiologies</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1b: characteristics</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1c: anatomical/physiological</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1d: acoustic</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1e: psychological</td>
<td>232 441 333 552 440</td>
</tr>
<tr>
<td>III-C-1f: developmental</td>
<td>232 552 333 440 441</td>
</tr>
<tr>
<td>III-C-1g: linguistic and cultural</td>
<td>232 552 333 440 441</td>
</tr>
</tbody>
</table>
### III-C-2: Fluency.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-2a: etiologies</td>
<td>232</td>
</tr>
<tr>
<td>III-C-2b: characteristics</td>
<td></td>
</tr>
<tr>
<td>III-C-2c: anatomical/physiological</td>
<td></td>
</tr>
<tr>
<td>III-C-2d: psychological</td>
<td>232</td>
</tr>
<tr>
<td>III-C-2e: developmental</td>
<td>232</td>
</tr>
<tr>
<td>III-C-2f: linguistic and cultural</td>
<td></td>
</tr>
</tbody>
</table>

### III-C-3: Voice and Resonance, including respiration and phonation.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-3a: etiologies</td>
<td></td>
</tr>
<tr>
<td>III-C-3b: characteristics</td>
<td>232</td>
</tr>
<tr>
<td>III-C-3c: anatomical/physiological</td>
<td></td>
</tr>
<tr>
<td>III-C-3d: acoustic</td>
<td>232</td>
</tr>
<tr>
<td>III-C-3e: psychological</td>
<td>232</td>
</tr>
</tbody>
</table>

### III-C-4: Receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-4a: etiologies</td>
<td>440</td>
</tr>
<tr>
<td>III-C-4b: characteristics</td>
<td>440</td>
</tr>
<tr>
<td>III-C-4c: anatomical/physiological</td>
<td>440</td>
</tr>
<tr>
<td>III-C-4d: psychological</td>
<td>440</td>
</tr>
<tr>
<td>III-C-4e: developmental</td>
<td>440</td>
</tr>
<tr>
<td>III-C-4f: linguistic and cultural</td>
<td>440</td>
</tr>
</tbody>
</table>
### III-C-5: Hearing, including the impact on speech and language.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-5a: etiologies</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5b: characteristics</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5c: anatomical/physiological</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5d: acoustic</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5e: psychological</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5f: developmental</td>
<td>232</td>
</tr>
<tr>
<td>III-C-5g: linguistic and cultural</td>
<td>232</td>
</tr>
</tbody>
</table>

### III-C-6: Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding; orofacial myofunction).

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-6a: etiologies</td>
<td>542</td>
</tr>
<tr>
<td>III-C-6b: characteristics</td>
<td>542</td>
</tr>
<tr>
<td>III-C-6c: anatomical/physiological</td>
<td>552</td>
</tr>
<tr>
<td>III-C-6d: psychological</td>
<td>542</td>
</tr>
<tr>
<td>III-C-6e: developmental</td>
<td>542</td>
</tr>
</tbody>
</table>

### III-C-7: Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning).

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-7a: etiologies</td>
<td>552</td>
</tr>
<tr>
<td>III-C-7b: characteristics</td>
<td>552</td>
</tr>
<tr>
<td>III-C-7c: anatomical/physiological</td>
<td>552</td>
</tr>
<tr>
<td>III-C-7d: psychological</td>
<td>552</td>
</tr>
<tr>
<td>III-C-7e: developmental</td>
<td>552</td>
</tr>
<tr>
<td>III-C-7f: linguistic and cultural</td>
<td>552</td>
</tr>
</tbody>
</table>
III-C-8: Social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities).

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-8a: etiologies</td>
<td>533</td>
</tr>
<tr>
<td>III-C-8b: characteristics</td>
<td>533</td>
</tr>
<tr>
<td>III-C-8c: psychological</td>
<td>533</td>
</tr>
<tr>
<td>III-C-8d: developmental</td>
<td>533</td>
</tr>
<tr>
<td>III-C-8e: linguistic and cultural</td>
<td>533</td>
</tr>
</tbody>
</table>

III-C-9: Communication modalities (including oral, manual, augmentative, and alternative communication techniques and assistive technologies).

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-9a: etiologies</td>
<td>542</td>
</tr>
<tr>
<td>III-C-9b: characteristics</td>
<td>434</td>
</tr>
<tr>
<td>III-C-9c: anatomical/physiological</td>
<td>434</td>
</tr>
<tr>
<td>III-C-9d: psychological</td>
<td>434</td>
</tr>
<tr>
<td>III-C-9e: developmental</td>
<td>434</td>
</tr>
<tr>
<td>III-C-9f: linguistic and cultural</td>
<td>434</td>
</tr>
</tbody>
</table>

Standard III-D: The applicant must possess a knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of the anatomical/physiological (AP), psychological (P), developmental (D), and linguistic and cultural (CLD) correlates of the disorders. Specific knowledge must be demonstrated in the following areas: [The course syllabi specify how and where the various bases (AP, P, etc.) are addressed.]

III-D-1: Articulation

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-1a: Prevention</td>
<td>333</td>
</tr>
<tr>
<td>III-D-1b: Assessment</td>
<td>333</td>
</tr>
<tr>
<td>III-D-1c: Intervention</td>
<td>333</td>
</tr>
</tbody>
</table>
### III-D-2: Fluency.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-2a: Prevention</td>
<td>536</td>
</tr>
<tr>
<td>III-D-2b: Assessment</td>
<td>536</td>
</tr>
<tr>
<td>III-D-2c: Intervention</td>
<td>536</td>
</tr>
</tbody>
</table>

### III-D-3: Voice and Resonance, including respiration and phonation.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-3a: Prevention</td>
<td>538</td>
</tr>
<tr>
<td>III-D-3b: Assessment</td>
<td>538</td>
</tr>
<tr>
<td>III-D-3c: Intervention</td>
<td>538</td>
</tr>
</tbody>
</table>

### III-D-4: Receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-4a: Prevention</td>
<td>T&amp;L 400 533</td>
</tr>
<tr>
<td>III-D-4b: Assessment</td>
<td>T&amp;L 400 533 583</td>
</tr>
<tr>
<td>III-D-4c: Intervention</td>
<td>T&amp;L 400 533</td>
</tr>
</tbody>
</table>

### III-D-5: Hearing, including the impact on speech and language.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-5a: Prevention</td>
<td>431 530 T&amp;L 400</td>
</tr>
<tr>
<td>III-D-5b: Assessment</td>
<td>431 434 530 T&amp;L 400</td>
</tr>
<tr>
<td>III-D-5c: Intervention</td>
<td>431 434 530 T&amp;L 400</td>
</tr>
</tbody>
</table>

### III-D-6: Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function For feeding; orofacial myofunction).

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-6a: Prevention</td>
<td>553</td>
</tr>
<tr>
<td>III-D-6b: Assessment</td>
<td>553</td>
</tr>
<tr>
<td>III-D-6c: Intervention</td>
<td>553</td>
</tr>
</tbody>
</table>
### III-D-7: Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning).

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-7a: Prevention</td>
<td>572</td>
<td></td>
</tr>
<tr>
<td>III-D-7b: Assessment</td>
<td>572</td>
<td></td>
</tr>
<tr>
<td>III-D-7c: Intervention</td>
<td>572</td>
<td></td>
</tr>
</tbody>
</table>

### III-D-8: Social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities).

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-8a: Prevention</td>
<td>533</td>
<td></td>
</tr>
<tr>
<td>III-D-8b: Assessment</td>
<td>533</td>
<td></td>
</tr>
<tr>
<td>III-D-8c: Intervention</td>
<td>533</td>
<td></td>
</tr>
</tbody>
</table>

### III-D-9: Communication modalities (including oral, manual, augmentative, and alternative communication techniques and assistive technologies).

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-D-9a: Assessment</td>
<td>542</td>
<td></td>
</tr>
<tr>
<td>III-D-9b: Intervention</td>
<td>542</td>
<td></td>
</tr>
</tbody>
</table>

### Standard III-E: The applicant must demonstrate knowledge of standards of ethical conduct.

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-E: Knowledge of standards of ethical conduct</td>
<td>584</td>
<td>484</td>
</tr>
</tbody>
</table>

### Standard III-F: The applicant must demonstrate knowledge of processes used in research and the integration of research principles into evidence-based clinical practice.

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-F: Research &amp; integration of research &amp; clinic</td>
<td>525</td>
<td>533</td>
</tr>
</tbody>
</table>

### Standard III-G: The applicant must demonstrate knowledge of contemporary professional issues.

<table>
<thead>
<tr>
<th></th>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-G: Knowledge of professional issues</td>
<td>583</td>
<td>584</td>
</tr>
</tbody>
</table>
Standard III-H: The applicant must demonstrate knowledge about certification, specialty recognition, licensure, and other relevant professional credentials.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-H: Knowledge of certification</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>T&amp;L 400 584</td>
</tr>
</tbody>
</table>

**STANDARD IV: PROGRAM OF STUDY—SKILLS OUTCOMES**

Standard IV-B: The applicant must possess skill in **oral** and **written** or other forms of communication sufficient for entry into professional practice.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-B-1: Oral Communication</td>
<td>525</td>
</tr>
<tr>
<td></td>
<td>583</td>
</tr>
<tr>
<td></td>
<td>584</td>
</tr>
<tr>
<td></td>
<td>584</td>
</tr>
<tr>
<td>IV-B-2: Written Communication</td>
<td>484</td>
</tr>
<tr>
<td></td>
<td>485</td>
</tr>
<tr>
<td></td>
<td>525</td>
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<td>533</td>
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<td>536</td>
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<td>583</td>
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<td>584</td>
</tr>
</tbody>
</table>

Standard IV-C: The applicant for certification in speech-language pathology must complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and **375 hours must be spent in direct client/patient contact.**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-C-1: Number of Observation Hours</td>
<td>484</td>
</tr>
<tr>
<td></td>
<td>485</td>
</tr>
<tr>
<td>IV-C-2: Number of direct client contact</td>
<td>484</td>
</tr>
<tr>
<td></td>
<td>485</td>
</tr>
</tbody>
</table>

Standard IV-D: At least 325 of the 400 clock hours must be completed while the applicant is engaged in graduate study in a program accredited in speech-language pathology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. **The student will complete at least 325 clock hours at the graduate level.**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-D: Clock hours per semester</td>
<td>584</td>
</tr>
<tr>
<td></td>
<td>585</td>
</tr>
</tbody>
</table>
Standard IV-F: Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-F-1: Child</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-2: Adult</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-3: culturally/Linguistically Diverse</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-4: Articulation</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-5: Fluency</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-6: Voice &amp; Resonance incl. resp. &amp; phon.</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-7: Receptive and expressive language</td>
<td>584</td>
</tr>
<tr>
<td>IV-F-8: Hearing, incl impact on speech &amp; lang.</td>
<td>584</td>
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<td>IV-F-9: Swallowing</td>
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<td>IV-F-10: Cognitive aspects of communication</td>
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<td>IV-F-11: Social aspects of communication</td>
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<tr>
<td>IV-F-12: Communication modalities</td>
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</tbody>
</table>

Standard IV-G: The applicant for certification must complete a program of study that includes supervised clinical experiences sufficient in breadth and depth to achieve the following skills outcomes:

In addition to direct client/patient contact, clinical skills may be developed and demonstrated through successful performance on academic course work and examinations, application of information obtained through clinical experiences, and completion of independent projects. In instances where applicants have not had direct patient contact with disorder and difference categories, appropriate alternative methods for skills development must be demonstrated. The skills outcomes listed below are addressed in the course syllabi and clinical practicum records.

1. Evaluation:

Conduct screening and prevention procedures (including prevention activities). Collect case history information and integrate information from clients/patients, family, caregivers, teachers, relevant others, and other professionals. Select and administer appropriate evaluation procedures, such as behavioral observations, non-standardized and standardized tests, and instrumental procedures. Adapt evaluation procedures to meet client/patient needs. Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention. Complete administrative and reporting functions necessary
to support evaluation. Refer clients/patients for appropriate services.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
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<tbody>
<tr>
<td>IV-G-1a: Articulation</td>
<td>333</td>
</tr>
<tr>
<td>IV-G-1b: Fluency</td>
<td>536</td>
</tr>
<tr>
<td>IV-G-1c: Voice &amp; Resonance incl. resp. &amp; phon.</td>
<td>538</td>
</tr>
<tr>
<td>IV-G-1d: Receptive and expressive language</td>
<td>538</td>
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<tr>
<td>IV-G-1e: Hearing, incl impact on speech &amp; lang</td>
<td>533</td>
</tr>
<tr>
<td>IV-G-1f.: Swallowing</td>
<td>584</td>
</tr>
<tr>
<td>IV-G-1g: Cognitive aspects of communication</td>
<td>572</td>
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<tr>
<td>IV-G-1h:. Social aspects of communication</td>
<td>434</td>
</tr>
<tr>
<td>IV-G-1i: Communication modalities</td>
<td>542</td>
</tr>
</tbody>
</table>

2. Intervention:

Develop setting -appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the planning process. Implement intervention plans (Involve clients/patients and relevant others in the intervention process. Select or develop and use appropriate materials and instrumentation for prevention and intervention. Measure and evaluate clients'/patients' performance and progress. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients. Complete administrative and reporting functions necessary to support intervention. Identify and refer clients/patients for services as appropriate.

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<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>IV-G-2a: Articulation</td>
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<tr>
<td>IV-G-2b: Fluency</td>
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<tr>
<td>IV-G-2c: Voice &amp; Resonance incl. resp. &amp; phon.</td>
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<td>IV-G-2d: Receptive and expressive language</td>
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<td>IV-G-2e: Hearing, incl impact on speech &amp; lang</td>
<td>434</td>
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<tr>
<td>IV-G-2f.: Swallowing</td>
<td>583</td>
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<tr>
<td>IV-G-2g: Cognitive aspects of communication</td>
<td>572</td>
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<tr>
<td>IV-G-2h:. Social aspects of communication</td>
<td>434</td>
</tr>
<tr>
<td>IV-G-2i: Communication modalities</td>
<td>542</td>
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</tbody>
</table>
3. Interaction and Personal Qualities:

Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others. Collaborate with other professionals in case management. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others. Adhere to the ASHA Code of Ethics and behave professionally.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
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<tbody>
<tr>
<td>IV-G-3a: Articulation</td>
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<tr>
<td>IV-G-3b: Fluency</td>
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<tr>
<td>IV-G-3c: Voice &amp; Resonance incl. resp. &amp; phon.</td>
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<td>584</td>
</tr>
<tr>
<td>IV-G-3i: Communication modalities</td>
<td>584</td>
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</tbody>
</table>
STANDARD V: ASSESSMENT The applicant for certification must demonstrate successful achievement of the knowledge and skills delineated in Standard III and Standard IV by means of both formative and summative assessment.

Standard V-A: Formative Assessment

The applicant must meet the education program’s requirements for demonstrating satisfactory performance through ongoing formative assessment of knowledge and skills.  
(Fulfillment of requirements for previous standards entails fulfillment of this standard.)

<table>
<thead>
<tr>
<th>Date Met</th>
<th>V-A: Formative assessment requirements</th>
</tr>
</thead>
</table>

Standard V-B: Summative Assessment

The applicant must pass the national examination adopted by ASHA for purposes of certification in speech-language pathology.

| Date Met | V-B: ASHA national exam passed: |
I. MISSION STATEMENT

The larger mission of the Department of Communication Sciences and Disorders (CSD) is to provide its students with a liberal arts education through the College of Arts and Sciences, including instruction in the arts and sciences, communication skills, habits of independent thought, and the understanding of diverse cultures. The specific mission of CSD is to provide academic and clinical instruction, supervised clinical practica, and research experience for students that will lead to state, regional and national accreditation and licensing; to provide clinical services to individuals, groups and agencies within the University and the greater Grand Forks area; to provide professional leadership in local, state, and national organizations; to contribute to the body of knowledge concerning communication sciences and communication disorders; and to serve the University through participation in its governance. This mission is directed at meeting the interests and needs of the University of North Dakota constituency.

The Undergraduate Major

The undergraduate coursework in CSD is grounded in a liberal arts education. The undergraduate degree is designed to prepare the student to become a lifelong learner, a critical thinker, and a problem solver. The coursework also is designed to prepare the undergraduate major to pursue graduate work.

The Master’s Degree Program

A master’s degree in speech-language pathology is required for professional certification in the field of speech-language pathology. The master’s degree program at UND has been accredited by the Council on Academic Accreditation in Speech-Language Pathology and Audiology of the American Speech-Language and Hearing Association (ASHA).

The Ph.D. Program

This program provides a program of study in normal and disordered speech, language, and hearing, with an emphasis on the acquisition of research skills, that prepares the student for employment in a variety of settings including university teaching and research, clinical services and research, and research and/or consultation in industry.

II. Student Learning Goals and Objectives and Their Link to Coursework: the KASA Form

The basis of CSD’s learning goals and objectives are the 2005-mandated ASHA standards for critical knowledge and skills necessary for the practice of speech-language pathology. These standards outline the knowledge and skills that are expected of all students completing a master’s degree in accredited programs in speech-language
pathology. The standards are listed (i.e., Standard III-A, Standard III-B, etc.) in the accompanying form, titled ASSESSMENT OF KNOWLEDGE AND SKILLS SUMMARY (referred to as the KASA form in the field and in the rest of this document).

Each student has a KASA form in his/her file, and the KASA form serves as a record that tracks each student’s progress through the CSD curriculum, both at the undergraduate and graduate levels. As the student successfully moves through the curriculum and completes the coursework that satisfies each standard, that standard is checked off.

The content of CSD courses is in the great majority of cases aimed at satisfying the various AHSA standards. Each course syllabus lists the specific objectives, outcomes, and assessment methods and criteria for that course. A listing of the specific objectives and outcomes for each course is listed in the CSD Learning Outcomes. Most courses include objectives and outcomes that apply to several ASHA standards. The KASA form ties the course objectives to the ASHA standards by listing, under each standard, the various courses that contain objectives and outcomes that satisfy the standard.

The ASHA standards mandate the acquisition of a large body of knowledge and skills that is gained through both undergraduate and graduate course work. A student who obtains a master’s in speech-language pathology in reality has spent the better part of two years of undergraduate education as well as two years of graduate education obtaining the necessary course work. This is reflected in the KASA form, which lists both undergraduate and graduate courses. Thus, an assessment plan for CSD must include both undergraduate and graduate course work.

III. Specific Assessment Methods for Learning Outcomes

The ASHA standards require that CSD specify its assessment methods for the various learning outcomes, its criteria for having successfully achieved learning objectives and outcomes, and, in addition, its remediation procedures for students who have not met the assessment criteria. Students are not given credit for having met a particular standard until assessment criteria for that standard have been met. Assessment methods and criteria are stated in the course syllabi, as are remediation processes. The latter involve, in general, reviewing course material and re-examination or re-doing assignments. A listing of the specific assessment methods, assessment criteria, and remediation processes is provided in the CSD Learning Outcomes.

IV. Data Collection, Analysis, and Documentation

At the end of each semester, each instructor will generate a list for each course taught, indicating (1) which students have met assessment criteria without remediation, (2) which students have met assessment criteria with remediation, and (3) which students have not met the assessment criteria for each of their courses. The instructor will send these lists to the CSD administrative secretary, who will note these results with their dates on the students’ KASA forms wherever the course appears on the form. As the student fulfills the coursework requirements for the ASHA standards on the KASA form, these standards
will be checked off and dated. Thus, the KASA forms will provide a running, comprehensive record of students’ achievement of the learning goals for all courses.

The major data analysis planned is that described in (1) below. Those in (2), (3) and (4) may be used. Others may be used as the need arises.

(1) Aggregate data will be compiled by the department’s administrative secretary listing the proportion of students that are meeting the individual course learning goals without remediation, the proportion of students that are meeting individual learning course goals with remediation, and the proportion of students that are not meeting learning course goals. A yearly summary of the data from this analysis for all courses will be compiled by the administrative secretary in May and distributed to the faculty at the beginning of the following academic year.

(2) A finer-grained analysis of these data, indicating exactly which course goals need remediation or are not being met can be obtained, if regarded as useful in certain instances, by asking instructors to analyze their records.

(3) Advisors will be asked to review achievement data for individual students to monitor their progress.

(4) Aggregate data for courses under any ASHA standard or area of the curriculum can be compiled for curriculum planning purposes.

(5) Other useful byproducts can be extracted from the KASA data. For example, it will be possible to determine the total number of students completing all courses listed on the KASA form for each semester.

V. Other Assessment Tools

Clinical Evaluations: CSD uses the following methods of assessing students’ clinical skills.

(1) CSD clinic supervisors provide extensive written evaluations of student clinic performance. These evaluations are done in mid-semester and at the end of the semester and become part of the student’s file. The evaluations are used in both undergraduate and graduate clinical practica.

(2) Questionnaires concerning the performance of student clinicians are sent to external site supervisors. (All CSD students in the master’s program complete externships at hospitals and clinics in this area and elsewhere.) The questionnaires provide feedback on both the students’ performance and their training. They are currently kept in the files of the clinic coordinator.

The records alluded to in (1) and (2) will be analyzed by the clinic coordinator to determine strengths and weaknesses in the clinical curriculum at the end of the academic year.
Comprehensive Examinations: master’s students complete a series of comprehensive examinations in the various areas of the curriculum (e.g., fluency, phonatory disorders, etc.) Exam criteria are established by the faculty member responsible for the area of the curriculum examined. Students must retake examinations in cases where performance is not satisfactory. Faculty will be asked to summarize the examination results in their respective areas and forward these to the chair.

Thesis/Independent Studies: All master’s students write theses and independent studies under the direction of the graduate faculty. These projects can yield significant information about the research and writing skills of the master’s students. Thesis and independent study advisors will be asked to present reports summarizing the research and writing skills of the students who complete these projects under their supervision.

VI. How the Assessment Results will be Used

A faculty meeting, held at the beginning of the academic year, will be dedicated to the presentation and discussion of the assessment data from the previous academic year. At that time the faculty will decide whether the data warrant program changes. The data will include the following:

(1) The KASA form data.

(2) The clinic skills data.

(3) The comprehensive examinations data.

(4) The thesis/independent study data.
I. Overview of the nature of speech, language, and writing.  

*ASHA Standard III-B-7, Knowledge of the basic human communication processes.*

**Knowledge outcomes:**
- A general knowledge of the purview of phonetics
- An understanding of the concept of speech and the concept of language
- An understanding of the difference between speech and language
- An understanding of the differences between speech and writing
- An understanding of why English spelling is not phonetic
- An introductory knowledge of the International Phonetic Alphabet

**Achievement goals:**
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

**Achievement assessment:**
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

II. Overview of the systems of speech production. *ASHA Standard III-B-7, Knowledge of the basic human communication processes.*

**Knowledge outcomes:**
- A general knowledge of the anatomical structures of speech: the lungs; the larynx; the pharynx, the oral cavity, and the nasal cavity.

**Achievement goals:**
The student will be able to accurately and precisely define, discuss, and/or distinguish the above structures and concepts.

**Achievement assessment:**
The student's attainment of the achievement goals will be assessed using paper and pencil examination.
III. Articulatory Phonetics: The vowels. ASHA Standard III-B-7, Knowledge of the basic human communication processes. ASHA Standard III-C-1g, Knowledge of the nature of speech language, hearing, and communication disorders and differences and swallowing disorders.

Knowledge outcomes:
The articulatory classification of the vowels: the vowel space, rounding, and the tense-lax distinction
The articulatory description of the vowels of English
The articulatory description of the diphthongs
Dialectal variation in English vowels
The articulatory description of selected non-English vowels
The articulatory description of non-adult vowel pronunciations
The articulatory description of disordered vowel pronunciations
The effect of stress on vowels
The IPA symbols for the English vowels and selected non-English vowels

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

Achievement assessment:
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes:
The ability to transcribe the vowels of normal speakers of English as first language
The ability to transcribe the vowels of children who are acquiring the vowels of English
The ability to transcribe the vowels of speakers of English with disordered vowel articulation

Skills assessment:
(1) The student will perform satisfactorily on two examinations in which the students transcribe taped productions of normal and disordered vowels
(2) The student will satisfactorily complete an assignment in which they will tape and transcribe samples of everyday speech.

IV. Consonant production. ASHA Standard III-B-7, Knowledge of the basic human communication processes. ASHA Standard III-C-1g, Knowledge of the nature of speech language, hearing, and communication disorders and differences and swallowing disorders.
A. Articulatory phonetics: the consonants

Knowledge outcomes: The articulatory classification of the consonants
   Manners of articulation
   Places of articulation
   Voicing
   The IPA symbols for the consonants

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

Achievement assessment:
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes:
The ability to transcribe the consonants of normal speakers of English as a first language
The ability to transcribe the consonants of children who are acquiring the consonants of English
The ability to transcribe the consonants of speakers of English with disordered consonant articulation

Skills assessment:
(1) The student will perform satisfactorily on two examinations in which the students transcribe taped productions of normal and disordered consonants
(2) The student will satisfactorily complete an assignment in which they will tape and transcribe samples of everyday speech.

V. Speech dynamics. ASHA Standard III-B-7, Knowledge of the basic human communication processes.

Knowledge outcomes:
   Speech-sound articulation as a continuous process
   Concept of coarticulation
   Sound variation as a result of coarticulation
   Classification of combinatory phenomena
   The interaction between combinatory phenomena and speech registers

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above structures and concepts.
Achievement assessment:
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes:
The ability to transcribe normal and abnormal combinatory phenomena, including devoicing, nasalization, aspiration, shifts in vowel articulation, deletions, substitutions, etc.

Skills assessment:
THE STUDENT WILL PERFORM SATISFACTORILY ON ONE EXAMINATION IN WHICH THE STUDENTS TRANSCRIBE TAPE PRODUCTIONS OF NORMAL AND ABNORMAL COMBINATORY PHENOMENA.

VI. Speech variation. ASHA Standard III-B-7, Knowledge of the basic human communication processes. ASHA Standard III-C-1g, Knowledge of the nature of speech language, hearing, and communication disorders and differences and swallowing disorders.

Knowledge outcomes:
The concept of dialect
Types of dialects: regional, class, ethnic, etc.
Standard vs. non-standard dialects
The SLP's approach to non-standard dialects
The concept of speech style, or register

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

Achievement assessment:
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes:
The ability to transcribe dialect differences.

Skills assessment:
THE STUDENT WILL SATISFACTORILY COMPLETE TWO ASSIGNMENT IN WHICH THEY TRANSCRIBE SAMPLES OF A RANGE OF DIALECTS OF AMERICAN ENGLISH.

VII. Phonemics and phonotactics. ASHA Standard III-B-7, Knowledge of the basic human Communication processes.

A. Phonemics
Knowledge outcomes:
Concepts of the phone, allophone, phoneme
Complementary distribution vs. Contrastive distribution
Link between allophonic variation and coarticulation
Phonemic organization in different languages
Phonemic level vs. phonetic level
Broad vs. narrow transcription

B. Phonotactics

Knowledge outcomes:
The syllable
Phonotactic constraints

Achievement goals (the following are for A. and B.): The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

Achievement assessment: The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes: The ability to perform simple phonemic analyses.

Skills assessment: The student will satisfactorily complete a problem set in which they determine whether phones are in contrastive or complementary distribution.

VIII. Suprasegmentals. ASHA Standard III-B-7, Knowledge of the basic human Communication processes. 

A. Linguistic description

Knowledge outcomes: Suprasegmentals vs. segments Stress Intonation and tone Rhythm and duration

Achievement goals: The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.
Achievement assessment:
The student's attainment of the achievement goals will be assessed using paper and pencil examination.

Skills outcomes:
The ability to recognize and transcribe stress and intonation patterns.

Skills assessment:
The student will satisfactorily complete an assignment in which they are asked to tape record a sample of American English and transcribe the stress patterns at the word, phrase, and sentence levels of a set of utterances from that sample.

IX. Distinctive features. IX. Distinctive features. ASHA Standard III-B-7, Knowledge of the Basic human Communication processes.

Knowledge outcomes:
- Distinctive feature theory
- Major class features
- Examples of feature descriptions

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.

Achievement assessment:
The student's attainment of the achievement goals will be assessed using a paper and pencil examination.

X. Phonological processes. ASHA Standard III-B-7, Knowledge of the basic human Communication processes. ASHA Standard III-C-1g, Knowledge of the nature of speech language, hearing, and communication disorders and differences and swallowing disorders.

Knowledge outcomes:
The concept of the phonological process
Types of phonological processes:
- normal speech
- speech acquisition
- disordered speech
Phonological processes and the phonology of speech acquisition

Achievement goals:
The student will be able to accurately and precisely define, discuss, and/or distinguish the above concepts.
Achievement assessment:
The student's attainment of the achievement goals will be assessed using a paper and pencil examination.

CSD 333
ARTICULATION & PHONOLOGICAL DEVELOPMENT & DISORDERS

UNIT 1:  
THE GOAL OF THIS UNIT IS TO PROVIDE YOU WITH INTRODUCTORY INFORMATION ABOUT ARTICULATION/PHONOLOGY AND ITS RELATION TO THE FIELD OF COMMUNICATION DISORDERS

CHAPTER 1-4

KNOWLEDGE OUTCOMES: ASHA STANDARD III-B-3
THE STUDENT WILL UNDERSTAND:
- THE DIFFERENCE BETWEEN ARTICULATION AND PHONOLOGY
- THE CONCEPTS OF PHONETICS VERSUS PHONOLOGY AND FORM VERSUS FUNCTION
- THE DYNAMIC NATURE OF THE ARTICULATORY SYSTEM
- THE RATIONALE OF USE OF THE IPA
- THE TERMS “PHONOLOGICAL PATTERNS” AND “PHONOLOGICAL PROCESSES”

SKILLS OUTCOMES:
THE STUDENT WILL DEFINE RELEVANT TERMS ASSOCIATED WITH ARTICULATION AND PHONOLOGY (E.G., PHONETIC, PHONEMIC, SUBSTITUTION, DISTORTION, OMISSION, STRIDENCY, VELARIZATION, FACILITATION, STIMULABILITY, GENERALIZATION).

ASSESSMENT:  
THE STUDENT WILL BE REQUIRED TO SUCCESSFULLY DEFINE AND USE THESE TERMS MEANINGFULLY ON PAPER/PENCIL EXAMINATIONS

UNIT 2:  
THE GOAL OF THIS UNIT IS TO PROVIDE YOU WITH INFORMATION ABOUT THE DEVELOPMENT OF PHONOLOGY AND ARTICULATION, CHAPTER 5

KNOWLEDGE OUTCOMES: ASHA STANDARD III-C-1A, 1B, 1C, 1D, 1E, 1F, 1G
THE STUDENT WILL UNDERSTAND:
- THE DEVELOPMENT OF STRUCTURE AND FUNCTION OF THE ORAL MECHANISM
- THE CHARACTERISTICS OF PRELINGUISTIC BEHAVIOR
- EARLY SPEECH SOUNDS AND PHONOLOGICAL PATTERNS
- THE SPEECH CHARACTERISTICS OF INDIVIDUALS AS THEY PROGRESS THROUGH THE FOUR STAGES OF DEVELOPMENT

SKILL OUTCOMES:
THE STUDENT WILL BE REQUIRED TO SUCCESSFULLY DESCRIBE THE 4 STAGES OF SPEECH DEVELOPMENT (STAGE 1—BIRTH, THROUGH STAGE 4-5 YEARS AND OLDER).

ASSESSMENT:  
THIS SKILL WILL BE MONITORED AND EVALUATED THROUGH PERFORMANCE ON PAPER/PENCIL EXAMINATIONS.
UNIT 3: The goal of this unit is to promote your knowledge of data collection and methods of evaluating articulation and phonology, Chapters 6-7

Knowledge Outcomes: *asha Standard III-D-1a,1b,1c,1d*
The student will understand:

- The purposes of articulatory/phonological tests
- The context in which behaviors are evaluated
- The manner in which behaviors are recorded and elicited
- The purpose of stimulability testing
- The reason for collecting phonetic/phonemic inventories
- The methods of intelligibility analysis
- The importance of evaluating the speech mechanism
- The testing procedures that support articulation/phonological evaluation
- The decision making considerations in phonetic/phonemic terminology
- The terminology used to describe delayed/disordered speech

Skill Outcomes: *asha Standard IV-G-1a*
The student will describe characteristics of specific articulation/phonological disorders/delays
The student will demonstrate the ability to select age and culturally/linguistically appropriate diagnostic instruments for specific populations

Assessment: These skills will be evaluated by having students complete worksheets depicting various articulatory and/or phonological problems, view videotapes of children and adults with various speech characteristics, score and interpret various formal and informal diagnostics procedures, successfully complete in-class worksheets and paper/pencil examinations

UNIT 4: The goals of this unit are (1) to promote your knowledge about speech characteristics of special populations (those with disorders) and those with differences (CLD) and (2) to provide you with a solid information base about phonetic and/or phonological therapeutic approaches to help clients achieve normal speech production, Chapters 8-10

Knowledge Outcomes: *asha Standard III-D-1a,1b,1c,1d*
The student will understand:

- The speech characteristics of individuals from special populations (cleft palate, hearing impairment, developmental delay and motor speech disorders)
- The speech characteristics of individuals who speak English as a second language (CLD)
• APPROPRIATE TREATMENT APPROACHES FOR PRESCHOOL, SCHOOLAGE AND ADULT CLIENTS WHO DISPLAYARTICULATION/PHONOLOGICAL DELAYS/DISORDERS.

**SKILL OUTCOMES: ASHA STANDARD IV-G-2A**
The student will describe speech characteristics of individuals from special populations (see above) and select appropriate diagnostic tests to evaluate these individuals. The student will differentiate articulation disorders and differences from phonological delays and disorders by identifying, specifying and categorizing characteristics typical of each.

**ASSESSMENT:** These skills will be evaluated by having students discuss case studies presented in class, write long range goals, short term objectives and identify treatment approaches for specific situations. Students will also be expected to complete paper/pencil examinations.

**REMEDICATION:**
A failure to achieve 70% on all course exams and assignments will require remedial (additional) work in order to meet ASHA certification requirements. Remedial work will include a comprehensive review of the topics treated followed by a written comprehensive examination on which a score of 70% must be achieved. Scores on remediation activities to achieve the minimum level of competency on the knowledge and skill outcomes will not be used to compute the grade in the course.

**CSD 365: AGING & COMMUNICATION**

**KNOWLEDGE OUTCOMES: ASHA Standard III-B-4**
The following learner outcomes are listed below. Students who satisfactorily (grade of C or above) complete this course can expect to achieve the outcomes. Students will acquire:

- enhanced awareness of communication as a vital factor in the elderly person’s ability to maintain his or her own quality of life
- enhanced knowledge regarding the physical, sociological and psychological/cognitive aspects of aging as they relate to communication
- information regarding communication patterns and the normal aging process
- information regarding communication disorders as a result of pathological aging
- increased awareness of the necessity for the interdisciplinary team of professionals to work effectively within the aging network
- awareness and sensitivity regarding aging across various cultures and understanding of how to adapt management and/or treatment procedures that are sensitive to the need of culturally diverse populations
REMEDIATION:
A failure to achieve 70% on all course exams and assignments will require remedial (additional) work in order to meet ASHA certification requirements. Remedial work will include a comprehensive review of the topics treated followed by a written comprehensive examination on which a score of 70% must be achieved. Scores on remediation activities to achieve the minimum level of competency on the knowledge and skill outcomes will not be used to compute the grade in the course.

CSD 382: INTRO TO CLINICAL PRACTICUM

STUDENT OUTCOMES:

A. KNOWLEDGE OUTCOMES:

1. The student will identify and define communication differences, delays and disorders. Standard III-C

2. The student will recognize correct professional titles and describe entry qualifications for speech-language pathologists including ASHA Certification requirements. Standard III-H

3. The student will identify and describe the professional role of speech-language pathologists. Standard III-H

4. The student will identify and describe the professional work settings of a speech-language pathologist including the following:
   - Acute care hospitals
   - Rehabilitation hospitals/units
   - Skilled Nursing facilities
   - Community clinics
   - Residential facilities (special schools, psychiatric hospitals, group homes, prisons)
   - Infant/Toddler programs/preschool
   - Schools
   - Private practice settings
   Standard III-H

5. The student will review and describe the framework of the ASHA Code of Ethics and will summarize its relevance to the practice of speech-language pathology. Standard III-E

6. The student will describe ethical behavior in various situations and follow the ASHA Code of Ethics during clinical practicum experiences. Standard III-E
7. The student will describe other various regulatory codes such as the ASHA Scope of Practice, client bill of rights, child/elder abuse reporting, risk management issues, HIPAA regulations and supervision of aides and assistants. Standard III-H

8. The student will identify factors that will impact delivery of services to culturally and linguistically diverse populations. Standard III-F

9. The student will describe the content and purpose of typical record-keeping formats used in clinical settings including at least the following:
   - Screening summaries
   - Diagnostic reports
   - Treatment plans
   - Progress reports and notes
   - Lesson plans
   - SOAP notes
   Standard IV-B (2)

10. The student will define the process of case management including the significant steps/components. Standard III-D

11. The student will understand the concept of evidence-based practice and how this principal is applied to the provision of clinical services. Standard III-F

Assessment of Knowledge Outcomes: Students will complete quizzes, exams, and individual and group projects designed to assess the outcomes summarized above. Each student will achieve a minimum score of 70% on the rubric designed to score or rate each assessment task or activity.

Remediation: Students who do not achieve a 70% level of achievement will be required to review the material and complete additional assignments to demonstrate at least a 70% level of achievement.

B. Skill Outcomes:

1. The student will identify and describe a variety of communication disorders. Standard IV-G (1)

2. The student will design appropriate assessment techniques. Standard IV-G (1)

3. The student will learn how to conduct a basic oral facial examination. Standard IV-G (1)
4. THE STUDENT WILL IDENTIFY TARGET BEHAVIORS FOR ARTICULATION AND LANGUAGE DISORDERS. **STANDARD IV-G (2)**

5. THE STUDENT WILL WRITE TREATMENT GOALS AND OBJECTIVES FOR SELECTED TARGET BEHAVIORS. **STANDARD IV-G (2)**

6. THE STUDENT WILL DESIGN APPROPRIATE PROCEDURES FOR MEASURING PROGRESS. **STANDARD IV-G (2)**

7. THE STUDENT WILL WRITE SESSION TREATMENT PLANS. **STANDARD IV-G (2)**

8. THE STUDENT WILL LEARN TO SELECT AND EVALUATE CLINICAL ACTIVITIES TO MEET TARGETED OBJECTIVES. **STANDARD IV-G (2)**

9. THE STUDENT WILL LEARN HOW TO ORGANIZE AND RECORD CLINICAL DATA. **STANDARD IV-G (2)**

10. THE STUDENT WILL LEARN THE FORMAT FOR HOW TO WRITE PROGRESS NOTES AND REPORTS. **STANDARD IV-B (2)**

**Assessment of Skill Outcomes:** Students will complete several activities centered around a case study to demonstrate acquisition of the skill outcomes. Activities will include both individual and group assignments. Each student will achieve a minimum score of 70% on the rubric designed to score or rate each task or activity.

**Remediation:** Students who do not achieve a 70% level of achievement will be required to review the material and complete additional assignments to demonstrate at least a 70% level of achievement.

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**T & L 400: METHODS/MATERIALS**

**School Speech, Language, and Hearing Programs**

**Instructor:** Mary Jo Schill, M. A., Clinical Assistant Professor

**Outcomes:** The following learner outcomes have been identified for this course. Students who satisfactorily (grade of “C” or above) complete this course can expect to achieve the following outcomes:

**Knowledge Outcomes**

**Students will learn:**

1. The basic concepts of an educational model of service delivery and how it differs from a medical model
2. The core roles of a school speech-language pathologist including:
   • Prevention
   • Identification
   • Assessment
   • Evaluation
   • Eligibility determination
   • IEP/IFSP development
   • Caseload management
   • Intervention
   • Counseling
   • Re-evaluation
   • Transition
   • Dismissal
   • Supervision
   • Documentation and accountability

3. General historical information about the profession of speech-language pathology in the schools and how this information provides the context for current school programs

4. The legislative and regulatory issues that provide the foundation for educational service delivery

5. The basic tenets of the Individuals with Disabilities Education Act including the most recent amendments

6. The rights and due process safeguards for children receiving special education services

7. Certification and licensing requirements

8. The structure and organization of typical public school programs

9. How special education is funded including Medicaid reimbursement for school services

10. The incidence and prevalence of communication disorders

11. How educational curriculum is defined and developed

12. The relationship between language, learning and literacy

13. How phonological development impacts reading
14. The role of school pre-referral teams in the identification of children with disabilities
15. Assessment guidelines and regulations
16. Definitions for communication disorders, delays, and differences
17. Eligibility criteria for school services including the disorder categories covered by IDEA
18. Differences between an IFSP and IEP
19. Timelines for development and review of IFSP and IEP documents
20. Various service delivery options available in education model including:
   - Monitor
   - Collaborative consultation
   - Classroom-based
   - Pull-out
   - Self-contained program
   - Community based
   - Combination
21. The role of the SLP in providing services to children with limited English proficiency
22. Factors that will impact delivery of services to Culturally/Linguistically Diverse (CLD) students
23. Criteria used to determine when a student no longer qualifies for special education speech-language services
24. The role of the SLP in supervision of individuals working with students on an IFSP/IEP including:
   - General education paraeducators
   - Speech-language pathology assistants
   - Speech-language pathology aides
25. Responsibilities in reporting suspected neglect/abuse

Skill Outcomes

The student will learn:
1. How to organize and carry-out speech-language screenings

2. How to complete a prior notification document as part of educational case management

3. How to develop and write an assessment plan

4. How to use a variety of assessment methods including:
   - Parent/staff/student interviews
   - Checklists and developmental scales
   - Curriculum-based tasks
   - Dynamic assessment
   - Portfolio/work sample assessment
   - Observation and anecdotal records
   - Standardized protocols

5. How to write an integrated assessment report

6. How to write an IEP including:
   - Documenting strengths and weaknesses in the present level of performance
   - Curriculum-based goals and objectives
   - Projected date, frequency, and duration of services
   - Accommodations
   - Characteristics of service
   - Outcome documentation
   - Transition information
   - Justification for least restrictive environment
   - Justification for extended school year

7. How to schedule students for services in a school setting: pre-school, elementary, middle and high school

8. How to document outcomes in an IFSP/IEP progress note

9. How to complete a dismissal or termination of services form
CSD-422: NEUROANATOMY FOR COMMUNICATION DISORDERS

Instructor: S. Amebu Seddoh

Knowledge and Skill Outcomes

Note: Outcomes for each topic on this page (1-5) meet ASHA Standard III-A, Basic Sciences.

1. Terminology and historical overview (chap. 1)

Be able to demonstrate knowledge of (a) terms used for neuroanatomical descriptions; (b) the contributions of early scholars to the understanding of neuroscience.

2. Gross Anatomy of the Nervous System (chap. 1)

Be able to demonstrate knowledge of the major divisions of the nervous system and their functions.

3. The brain (chap. 2, 3, 6, 18)

Be able to identify gross structures of the brain including (but not limited to) the cerebral hemispheres, the meninges, hind brain, brain stem, diencephalon, ventricular system, and the cerebellum.

4. Cell Types in the Nervous System (chap. 5)

Be able to differentiate between neurons and neuroglial cells; (b) to explain basic neuron morphology (cell body, dendrite, axon), as well as types, functions, and locations of neuroglial cells in the CNS.

5. Synapse and Impulse Transmission (chap. 5).

Be able to explain the basic physiology of action potential and impulse transmission (ASHA Standard III-A, Basic Sciences).

6. Cellular Organization of the Brain (Cytoarchitectures) (chap. 1)

Be able to use Brodmann’s numbers to identify brain structures.

7. Fiber Tracts of the Nervous System (chap. 2)

Be able to demonstrate knowledge of the functional anatomy of projection, commissural and association fibers (ASHA Standard III-A, Basic Sciences).
8. Vascular System (chap. 17)

Be able (a) to demonstrate knowledge of the anatomy of the arterial blood supply system of the brain; (b) to identify arteries including (but not limited to) Circle of Willis, middle cerebral artery, anterior cerebral artery, basilar artery. (ASHA Standard III-A, Basic Sciences).

9. The spinal cord (chap. 2, 3, 7, 11)

Be able to demonstrate knowledge of the gross anatomy of the spinal cord with special reference to its segments/divisions and internal organization (ASHA Standard III-A, Basic Sciences).

10. Peripheral Nervous System (PNS) (chap. 15)

Be able (a) to demonstrate knowledge of the anatomical components of the peripheral nervous system; (b) to identify each cranial nerve by name and number and associate it with its functions; (c) to assess cranial nerve function; (d) demonstrate knowledge about the role of the PNS in movement in general and in speech production in particular. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

11. Pyramidal System: The Two Neuron Concept (chap. 11, 14)

Be able to distinguish between upper and lower motor neuron syndromes (ASHA Standard III-A, Basic Sciences; ASHA Standard III-C, Anatomical correlates of speech/language).

12. The Basal Ganglia (chap. 13)

Be able to demonstrate knowledge of the gross anatomy of the basal ganglia and its components (ASHA Standard III-A, Basic Sciences).

13. Higher Mental Functions (chap. 19)

Be able to demonstrate basic knowledge of language representation in the human brain, (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication).

Remediation
A failure to make the minimum mean score will require remedial (additional) work in order to meet the requirements of ASHA certification. Remedial work will include a comprehensive review of the topics treated followed by an oral and/or written (comprehensive) examination.
CSD-425: LANGUAGE, MULTICULTURALISM AND COMMUNICATION DISORDERS

Instructor: S. Amebu Seddoh

1. Language and its structure—text chaps. 1-2; Bickford chaps. 1-5, 10-12; Parker & Riley chaps. 3-6; Poole chaps. 1, 4-6

Be able (a) to define minimal pairs and distinguish between allophones in free variation and complementary distributions; (b) to conduct phonemic analysis on unfamiliar languages without difficulty. (ASHA standard III-C, Nature of language).

2. Social stratification and linguistic variation—text chap. 6; Parker chap. 7

Demonstrate knowledge of (a) social stratification in the US and Canada; (b) linguistic variations associated with class and racial groups in the US and Canada. (ASHA standard III-B, Linguistic and cultural aspects of basic human communication; ASHA standard III-C, Nature of language, social aspects of communication).

3. Language and gender—text chaps. 7-8; Poole chap. 9

Be able to explain and exemplify gender differences in linguistic communication (ASHA standard III-C, Nature of language).

4. Bilingualism—text chap. 12; Poole chaps. 9-10

Demonstrate knowledge of the features of bilingualism and bilingual communities (ASHA standard III-C, Nature of language).

5. Culture

Be able (a) to define culture and demonstrate knowledge of the need for health care personnel to be sensitive to cultural differences; (b) to distinguish between ethnocentrism and cultural relativism. (ASHA standard III-B, Linguistic and cultural aspects of basic human communication).

6. Interactions of language and culture—text chaps. 3-4

(a) Demonstrate an understanding of how language influences culture and vice versa. (b) Be able to distinguish between language difference and language disorder. (c) Explain the factors that influence interethnic communication. (d) Demonstrate knowledge of the importance of cultural education for the Speech-Language Pathologist. (ASHA standard III-B, Linguistic and cultural aspects of basic human communication).
**Remediation**
A minimum mean score of 75 is required to pass the course. A failure to make the minimum mean score will require remedial (additional) work in order to meet the requirements of ASHA certification. Remedial work will include a comprehensive review of course material followed by an oral and/or written (comprehensive) examination.

CSD 483: CLINICAL TESTS AND MEASURES

Instructor: Audrey Glick

**KNOWLEDGE OUTCOMES**

1. **ASHA STANDARD III-D**
   - Educational Measurement and Testing
     - To understand the logic of testing
     - To understand the need for measurement in education
     - To understand norm and criterion referenced measurement
     - To understand statistical concepts used in testing
     - To understand test score interpretation
     - To understand the quality of measurement instruments (reliability and validity)
     - To understand basic considerations in testing and test selection
     - To understand legal and ethical considerations in assessment

2. **Presentation of Diagnostic Tests and Scales ASHA STANDARD III-D-4**
   - To become familiar with 30 diagnostic tests focusing on language comprehension/production and 6 developmental scales

3. **Review of Phonology/Articulation Tests and Measures ASHA STANDARD III-D-1**
   **This topic will be coordinated with information presented in CDIS 333: Articulation and Phonology.**

**ASSESSMENT OF KNOWLEDGE OUTCOMES**

- 3 or 4 paper and pencil exams
- Announced and unannounced quizzes
- In-class activities

**SKILLS OUTCOMES**

- ASHA STANDARD IV-G-1A, 1D
  - The student will demonstrate the ability to select appropriate diagnostic tests and scales for administration to individuals with respect to age, language and culture
• The student will demonstrate the ability to administer selected evaluative measures in the areas of language and general development.

• The student will demonstrate the ability to correctly score and interpret diagnostic tests presented in class.

ASSESSMENT OF SKILL OUTCOMES

• In-class practice administering diagnostic tests
• In-class proficiency sessions in administering diagnostic tests

CSD 484: Clinical Practicum

Instructor: Peggy Biberdorf, M.S., CCC-SLP

The following Knowledge Outcomes will be achieved:

• To provide students with an overview of the range and scope of communication disorders and differences with reference to age, disorder, severity and cultural/ethnic background.

• To provide students the opportunity to become familiar with procedures, forms and policies printed in the Departmental Handbook written by the faculty within the Department of Communication Sciences and Disorders.

• To provide students with an overview of case management skills necessary for planning and implementing intervention.

• To provide students with a framework for observation, with systematic methods for gathering, recording, analyzing and reporting data.

• To provide students with introductory information about the American Speech-Language-Hearing Association.

Method of Student Evaluation

Your grade will be based on attendance at clinical sessions and on your journal.

CSD 485: Clinical Practicum II

Peggy Biberdorf, M.S., CCC-SLP

Course Goals and Knowledge Outcomes

• To provide students with an overview of the range and scope of communication disorders and differences with reference to age, disorder, severity and cultural/ethnic background in order plan and implement assessment and
intervention. Your role as a co-clinician will include supervision as you are involved in live clinical sessions.

- To provide students the opportunity to become familiar with procedures, forms and policies printed in the Departmental Handbook written by the faculty within the Department of Communication Sciences and Disorders.

- The student clinician will demonstrate knowledge of the Code of Ethics as issued by the American Speech-Language and Hearing Association. (Standard III-E)

- The student will demonstrate knowledge of professional issues. (Standard III-G)

- The student will develop skills in written and oral forms of communication sufficient for entry into professional practice. (Standard IV-B)

- The student will obtain 25 observational clock hours of supervised clinical experience. (Standard IV-C) Failure to complete the required observational hours may disqualify the student from future clinical practica.

Students who successfully complete CSD 485 will have acquired entry level skills concerning:

1. Clinical processes relating to communication sciences and disorders
2. Case specific principles and techniques of intervention
3. An introduction to a variety of instructional methods
4. Ability to plan individualized treatment programs and administer therapeutic lessons
5. Ability to gather data and maintain records
6. To aid in the preparation of various reports, correspondence and activities
7. Ability to effectively communicate with others
8. Maintaining favorable public relations

**Behavioral Objectives**

- The student clinician will read and maintain familiarity with the ASHA Code of Ethics as demonstrated by participation in clinical seminars and assignments.

- The student clinician will perform at expected levels in clinical seminars via assignments (e.g., HIPPA, risk management, billing, certification, licensure, etc.) as demonstrated by attendance and participation during Clinical Affairs meetings.

- The student will maintain their Log of Observation Hours and write journal entries for each participation session for the case supervisor and complete a summative journal entry for the course instructor.
• The student will consistently use standard English conventions in oral and written communication skills as judged by the case clinician/supervisor. Evidence of entry skills may be assessed in the following areas:

  • File reviews
  • Planning
  • Conferences with case clinician and/or supervisor
  • Lesson plans/Treatment Plans/Progress Reports
  • Session evaluation
  • Data collection
  • Chart notes
  • Communication with other professionals/client/family or significant others/case clinician/supervisor and other personnel involved in client care

**Opportunities for Remediation**

A student whose performance is not as expected, may receive a grade deficiency at midterm. Clinical privileges may be lowered to probationary status or be terminated. A remediation plan may be developed by the case supervisor in consultation with the clinic coordinator to foster satisfactory ratings via make-up or new assignments. Additionally, the student’s grade may be lowered. Failure to remediate as evidenced by not achieving and maintaining satisfactory performance as outlined in the plan, may result in termination of clinical privileges.

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**CSD-501 Seminar: Right Hemisphere Damage**

Instructor: S. Amebu Seddoh

**Knowledge and Skill Outcomes**

**Historical overview of studies of the functions of the right hemisphere**—chap. 1

*Be able (a) to identify specific functions of the right hemisphere and provide supporting evidence for them; (b) demonstrate knowledge of the challenges involved in the study and understanding of the disorders associated with right hemisphere damage. (ASHA Standard III-A, Basic Sciences).*

**Neglect**—chap. 2

*Be able (a) to explain the nature and manifestations of neglect; (b) to demonstrate knowledge of theories, neural underpinnings and tests of neglect. (ASHA Standard III-A, Basic Sciences).*
Attention deficit—chap. 3

Be able (a) to explain the nature and types of attentional operations; (b) to demonstrate knowledge of the neural mechanisms underlying attentional operations. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

Communicative deficits: Prosody—chap. 4

Be able (a) to define prosody in linguistic, acoustic and perceptual terms; (b) to explain the role of the right hemisphere in processing prosody; (c) describe manifestations of prosodic disturbance following right hemisphere damage. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

Communicative deficits: Semantics—chap. 5

Be able to differentiate between convergent vs. divergent semantic processing and identify specific semantic processing problems exhibited by patients with right hemisphere damage (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

Communicative deficits: Discourse—chap. 6

Be able (a) to define discourse and identify its various types; (b) to demonstrate knowledge of the disorders of discourse processing following right hemisphere damage. (ASHA Standard III-A, Basic Sciences; ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

Affective deficits—chap. 7

Be able (a) to explain the neural mechanisms underlying emotional behavior; (b) to describe emotional processing problems associated with right hemisphere damage (ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language).

Assessment—chap. 8

(a) Demonstrate the ability to identify an appropriate test instrument for individual cases. (b) Be able to administer and interpret test results critically in order to arrive at a reliable diagnosis. (ASHA standard III-B, Neurological basis of basic human
communication; ASHA Standard III-C, Anatomical correlates of speech/language; ASHA standard III-D, Principles and methods of assessment; ASHA standard IV-G, Clinical experience).

**Treatment**—chap. 9

*Be able (a) to develop appropriate (evidence based) therapy program that has measurable and achievable goals for a patient with right hemisphere damage; (b) to demonstrate ability to measure client’s performance and progress; (c) to provide counseling to clients, caregivers, family members, etc. (ASHA standard III-B, Neurological basis of basic human communication; ASHA Standard III-C, Anatomical correlates of speech/language; ASHA standard IV-G, Clinical experience).*

**Remediation**

A minimum mean score of 75 is required to pass the course. A failure to make the minimum mean score will require remedial (additional) work in order to meet the requirements of ASHA certification. Remedial work will include a comprehensive review of course material followed by an oral and/or written (comprehensive) examination.

**CSD 525: Introduction to Research in Communication Sciences and Disorders**

Manish K. Rami, Ph.D., NPR, BBC

**Knowledge outcomes and assessment.**

The student will understand and be able to list and describe the attributes of a good researcher.

The student will be able to understand and explain the types of explanations (of observed phenomenon.)

The student will understand and be able to describe the methods of inquiry with examples.

The student will be understand and be able to describe and differentiate between methods of reasoning.

The student will understand and be able to explain what theories are?

The student will understand and be able to explain the concept of deductive testing of theories.

The student will understand and be able to explain the role of falsification of hypothesis.

The student will understand and be able to describe the development of research paradigms and of knowledge.

The student will understand and be able to explain the following: Qualitative research, Descriptive studies, Experimental studies, Correlational studies, and Causal comparative studies.

The student will understand and be able to outline issues concerning use of human subjects and be familiar with the IRB process. The student will successfully complete the online IRB training offered by RDC, UND.)
The student will understand and be able to explain the concept of various types of sampling using examples. The student will understand and be able to explain the process of planning an experimental study.

Skills outcomes

The student will be able to generate a simple hypothesis, when given two variables. The student will be able to conduct an online search for relevant literature using various search engines and databases. The student will be able to devise a simple experimental design using two variables. The student will be able to plan how to execute an experimental study. The student will be able to determine how to analyze data and perform appropriate statistical tests for a given data set. The student will also be able to interpret data using graphs, descriptives, and inferential statistical test results. The student will be able to design SSD from case studies. The student will be able to assess the utility of research in clinical applications.

Assessment of knowledge and skills

The student’s skill will be assessed using paper and pencil tests. Students will demonstrate mastery over the knowledge regarding ethical conduct in research by successfully completing the IRB training. Additionally, each student will also demonstrate ability to critically evaluate individual sections of an experimental article during class exercises, by submitting a written evaluation of an experimental paper and making an oral presentation of it, by conducting a review of literature and submitting a written research prospectus and making oral presentation.

Remediation

Opportunity to retake certain or all modules of the IRB training in case a student fails them exists via the RDC. Students who fail a paper and pencil test will be allowed to read the course material again and have opportunity to ask questions before taking make up tests that will be made available. Student’s progress on the comprehensive assignment will be reviewed every four weeks and they will be provided with written feedback to improve upon their assignments until the assignment is completed satisfactorily.

CSD 536: Seminar on Stuttering

Manish K. Rami, Ph.D.

(The following knowledge goals and skills and its assessements meet the new ASHA standards III-D, III-F.)
1. The student will be able to describe the difficulties in defining stuttering with respect to frequency and types of stuttering.

2. The student will be able to describe the five dimensions of fluency: continuity, rate, duration, coarticulation and, effort.

Knowledge Assessment: Students will explain the difficulties in defining stuttering and define the dimensions of fluency in a paper and pencil test.

Skill Assessment: Students will demonstrate the effect of the dimensions on fluency on normal speech by using pseudostuttering.

3. The student will be able to describe, identify, and measure the primary characteristics of stuttering in five ways: frequency of stuttering, mean duration of stuttering, frequency of specified disfluency types, speech rate; and ratings of severity.

4. The student will be able to describe, and identify the secondary characteristics of stuttering as observed in the motoric movements of head, face, limbs, and torso.

5. The student will be able to explain and identify the avoidance behaviors of postponement, starters, retrials, revisions, substitution, circumlocutions, mutism, and poor eye contact used by clients.

Knowledge Assessment: The student will view and analyze at least three speech samples on video tapes of people who stutter or of pseudostuttering acts by normals.

Skill Assessment: The student will be able to identify and count stuttering moments in speech, classify types of dysfluencies, measure speech rate, and rate severity of stuttering and describe the secondary behavior from audiovisual samples with 90% accuracy.

6. The student will be able to state the incidence and prevalence of the disorder/s.

7. The student will be able to explain the development of stuttering in terms of alpha, beta, delta, and gamma behaviors.

8. The student will be able to explain factors influencing the development of stuttering: age, gender, genetics, speech and language development, and brain injury.

9. The student will be able to list the factors contributing to the development and maintenance of stuttering (viz. Interrupting, time pressure, perfectionistic standards, and lack of attention) and to explain how to manipulate them.

10. The student will be able to discuss these theories of stuttering: Diagnosogenic, Demands and capacities, and Covert repair hypothesis.
Knowledge Assessment: The student will be able to list the factors and explain with examples in a paper and pencil test. Student will be able to point out the merits and demerits of each of the theories of stuttering and discuss its role in clinical applications in a short written essay form.

11. The student will be able to obtain a reliable case history via an interview of the client and/or parent/s/guardian/s of client, and information from other professionals.

12. The student will be able to collect representative speech samples in various situations (For ex. in clinic, home, classroom, playground, work environment, and other places important for client.)

13. The student will be able to administer tests for measuring severity (Stuttering severity instrument-3) and surveys feelings and attitude towards speech (Perception of self, S-24 Erikson scale, Children’s attitude toward talking,) analyze data, and interpret results.

14. The student will be able to conduct stimulability testing using the following techniques: Speaking in a nonhabitual manner (changing speaking rate, pitch, whispering, simulating accents, changing intonations, singsong manner, prolonged speech) choral reading, shadowing, using a metronome, delayed auditory feedback, and frequency altered feedback.

Skill Assessment: The student will demonstrate their abilities to obtain case history information in a pretend interview and the student will show how to administer, analyze, and interpret tests in a mock testing session. The student will submit a case report of the exercise.

15. The student will be able to describe the fluency shaping treatment procedures: slowed speech rate, easy vocal onset, blending, and light articulatory contacts.

16. The student will be able to describe the fluency modification treatment procedures: cancellation, pull-out, preparatory set, and pseudostuttering.

17. The student will be able to outline how to reduce speech associated excitement by counseling parents to speak slowly, to use simple language, to interrupt less often, and ask fewer questions requiring long complex answers.

Knowledge Assessment: The student will describe the fluency shaping and modification procedures in a paper and pencil test

Skill Assessment: The student will demonstrate the fluency shaping and modification procedures in their speech.

18. The student will be able to help the client how to generalize and maintain fluent speech by varying speech within the clinical setting, practicing in a structured situations, and use of self-help and support groups (NSA, SFA.)
Knowledge Assessment: The student will create a list of self-help and support resources and document information on how to get in touch with these resources and how to participate and take advantage of it.

CDIS 538: Management of Phonatory Disorders

Instructor: Wayne E. Swisher

MODULE I – ANATOMY AND PHYSIOLOGY OF RESPIRATION, PHONAION, AND RESONATION INVOLVED IN VOICE PRODUCTION  (STD. III B)

1. The student will be able to accurately identify and label anatomical structures that make up the voice production mechanism, including, cartilages, bones, muscles

2. The student will be able to accurately name and outline the neurological innervation of the larynx.

3. The student will be able to accurately describe the kinematics of the laryngeal mechanism during voice production, including movements of the larynx during voicing and relate these to the myoelastic-aerodynamic theory of voice production.

4. The student will be able to accurately identify and describe the respiratory structures important for voice production.

5. The student will be able to accurately describe the kinematics of the respiratory system during voice production.

6. The student will be able to accurately outline the respiratory lung volumes important to voice production.

7. The student will be able to accurately describe the airflow dynamics associated with voice production.

MODULE II – ACOUSTIC, AERODYNAMIC AND PERCEPTUAL PARAMETERS OF VOICE IN MALE AND FEMALES, CHILDREN AND ADULTS  (STD. III B)

8. The student can accurately describe the aerodynamic principles of voice production and discuss the aerodynamic myoelastic theory of voice production.
9. The student can accurately outline and describe the acoustic properties of the voice including:

10. The student can accurately explain the relationship between acoustic and perceptual properties of the voice
   a. Pitch – frequency
   b. Loudness – intensity
   c. Quality – frequency, intensity, resonance, perturbations, S/N ratio
   d. Inflection – frequency range, intensity
   e. Resonance – formant energy and distribution

11. The student can accurately discuss the relationship between electroglottograph measurements and acoustic and perceptual properties of the voice.

12. The student can accurately define and compare the acoustic properties of the “normal” voice in children, adolescents, adults, and geriatric speakers, male and female

Module III – Etiologies of Voice Disorders – Medical, Hyperfunctional, and Psychogenic in Males and Females, Adults and Children (Std. III-C3)

13. The student can accurately list and discuss the etiologies of functional voice disorders in males, females, children, adolescents, and adults

14. The student can accurately list and discuss the etiologies of medical voice disorders in males, females, children, adolescents, and adults

15. The student can accurately describe the relationship between acoustic and perceptual characteristics and clinical designators of voice disorders in males, females, children, adolescents, and adults with hyperfunctional or organic voice disorders.

Module IV – Assessment of Voice Disorders – Perceptual, Acoustic, Aerodynamic, Endoscopic, Electroglottograph (Std. III-B; III-D3; III-D9; III-E; III-F; III-G; IV-G)

16. The student can accurately outline and explain the case history and intake information important to successful assessment, diagnosis, intervention, and/or referral for voice disorders in males, females, children, adolescents, and adults
17. **The student can accurately outline and defend the clinical procedure to follow in the execution of a voice evaluation, including perceptual and instrumental assessments for males, females, children, adolescents, and adults.**

18. **The student can examine and accurately interpret data gathered during the assessment of a voice disorder patient using:**

**Module V – Intervention for Voice Disorders – Medical, Hyperfunctional, Adult and Child (Std. III-D 3; III-E; III-F; IV B; IV-G 1,2,3)**

19. **Interpreting, integrating, and analyzing the data collected from the case history and the assessments, the student can write, and provide a rationale for intervention goals for male, female, child, adolescent, and adult patients with a functional or medical voice disorder using evidence based practice data.**

20. Interpreting and integrating all available patient data, the student can list, describe, and provide examples of therapy techniques for the specific patients being considered for treatment, using evidenced based practice data to support therapy examples.

21. Analyzing data collected during therapy, the student can illustrate the patient’s progress or lack of progress, and describe any changes that might be needed in intervention.

22. Analyzing patient data gathered during therapy, and comparing the patient’s pre and post therapy data, the student can make appropriate recommendations regarding dismissal from therapy or referral for further assessment/treatment.

23. Analyzing patient data gathered during therapy, and comparing the patient’s pre and post therapy data, the student can make appropriate recommendations to help the patient maintain good vocal hygiene and the “good” voice after therapy, including home programming.

**Module VI – Spasmodic Dysphonia: Identification, Diagnosis, and Treatment (Std. III-D 3; III-E; III-F; IV B; IV-G 1,2,3)**

24. The student can accurately describe the clinical signs of spasmodic dysphonia, including onset and progression of symptoms, gender and age factors, patient description of the problem, perceptual and acoustic characteristics of spasmodic dysphonia, history of traditional voice therapy, and prognosis.

25. The student can accurately discuss the current understanding of the etiology of spasmodic dysphonia based on current research findings.
26. The student can accurately describe the diagnostic procedures appropriate for suspected cases of spasmodic dysphonia, including perceptual and instrumental assessments.

27. The student can accurately describe the current best practice plans for the treatment of spasmodic dysphonia and the role of the speech-language pathologist in that treatment plan.

28. The student can outline a home therapy program for a typical patient who has received treatment for spasmodic dysphonia.

Module VII – Laryngeal Cancer (Std. III-D 3; III-E; III-F; IV B; IV-G 1,2,3)

29. The student can accurately describe the types of laryngeal cancer that can potentially influence voice production.

30. The student can accurately describe the clinical signs of laryngeal cancer, including perceptual and acoustic characteristics of the voice, direct laryngoscopy findings, patient description of the problem, and pertinent case history data.

31. The student can accurately discuss the current understanding of the etiology of laryngeal cancer based on current research findings.

32. The student can accurately describe and demonstrate the diagnostic procedures appropriate for suspected cases of laryngeal cancer, including perceptual and instrumental assessments.

33. The student can accurately describe the current best practice plans for the treatment of laryngeal cancer and the role of the speech-language pathologist in that treatment plan.

34. The student can accurately compare and contrast the voice restoration therapies available to the laryngeal cancer patient, including the total, hemi, and partial laryngectomee, and choose the best therapy for a specific patient and explain why it is the best based on evidenced based practice data.

CSD 542: Neurogenic Communication Disorders II – Child Neurogenics

Instructor: Wayne E. Swisher, Ph.D.

Module I. Neurosubstrate for Speech and Language (Std. III-B; III-C)

1. The student will be able to describe the cerebral cortex centers that are important to speech and language initiation and control.
2. The student will be able to identify those areas of the brain that initiate motor movement vs. those areas of the brain the control motor movement.
3. The student will be able to describe the role of sensory input to the normal control of speech movements.
4. The student will be able to describe the subcortical structures important to speech motor movements.
5. The student will be able to identify and compare and contrast upper motor neurons from lower motor neurons.
6. The student will be able to identify and compare and contrast upper motor neuron lesions from lower motor neuron lesions.
7. The student can describe the various stages of brain development and the time frame for this development.
8. The student can describe the development of myelinization in the brain and its influence on sensory and motor development.
9. The student can describe reflex development and inhibition in an infant and its impact on normal motor development.
10. The student can discuss the significance of experiences and practice to the normal development of motor skills, including speech.

Module II. The Child with Brain Damage (Std. III-C; III-D; IV-B; IV-G)

11. The student can identify causes of congenital and acquired brain damage in children.
12. The student can discuss the relationship between congenital and acquired brain damage and cognitive, social, language, and speech development in each.

Module III. Cerebral Palsy (C.P.) (Std. III-C; Std. III-D)

13. The student can identify the types of CP and the clinical signs of each one.
14. The student can identify causes of CP and the relationship between site of lesion and type of CP.

Module IV. Traumatic Brain Injury (TBI) (Std. III-C; Std. III-D)

15. The student can describe the various potential causes of TBI.
16. The student can describe the relationship between the child’s age and cause of TBI.
17. The student can discuss the cognitive, sensory, speech, language, and educational problems associated with TBI.
18. The student can describe the speech and language problems associated with TBI and their relationship to cognitive, sensory and psychosocial factors.
Module VIII. Evaluation and Diagnosis Considerations for the Child With Brain Damage – C.P. and TBI (Std. III-C; Std. III-D)

19. The student can compare and contrast the “formal” speech and language evaluation from the “modified” evaluation.
20. The student can describe when is the appropriate time to use the “formal” evaluation as compared to the “modified” evaluation,
21. The student can discuss the team approach to the evaluation of the brain damaged child and identify the members of the team their role in the evaluation process.

Module IX. Management of the brain damaged child- C.P. and TBI (Std. III-C; Std. III-D)

22. The student can identify appropriate therapy goals and outcomes for children with brain damage.
23. The student can describe intervention strategies for children of various ages with brain damage.
24. The student can discuss the role of the speech-language pathologist in integrating the child with brain damage back into the school and community setting.

Module V. Developmental Apraxia of Speech (DAOS) (Std. III-C; Std. III-D)

25. The student can describe the suspected causes of developmental apraxia of speech (DAOS).
26. The student can describe the clinical signs associated with DAOS.
27. The student can compare and contrast phonological and articulation disorders with symptoms of DAOS.
28. The student can describe the tests and assessment procedures that might be used with children with suspected DAOS.
29. The student can identify those diagnostics signs thought to be important in the diagnosis of DAOS.
30. The student can outline various treatment strategies for DAOS and discuss the clinical successes of the various treatment programs.

Module VI. Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effect (FAE) (Std. III-C; Std. III-D)

31. The student can describe the cause of Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effect (FAE).
32. The student can describe the diagnostic clinical signs most often used in identifying FAS/FAE.
33. The student can identify the speech and language problems most often found in children with FAS/FAE.
34. The student can describe an assessment protocol appropriate for a child with FAS/FAE.
35. The student can outline various treatment strategies for FAS/FAE and the role of the speech-language pathologist.

Module VII. Fragile-X Syndrome (Std. III-C; Std. III-D)

32. The student can describe the suspected causes of Fragile-X syndrome
36. The student can describe the clinical signs associated with Fragile-X syndrome.
37. The student can describe the tests and assessment procedures that might be used with children suspected of Fragile-X syndrome.
38. The student can identify those diagnostics signs thought to be important in the diagnosis of children with Fragile-X syndrome.
39. The student can outline various treatment strategies for children with a diagnosis of Fragile-X syndrome and discuss the clinical successes of the various treatment programs.

Assessment: Each student will be assessed at the end of each module to determine how well she/he has acquired each of the outcomes identified. The ASHA requires that formative assessments be used to measure student’s learning throughout a course of study. Formative assessment is an ongoing measurement of the knowledge and skills being acquired by students throughout the duration of this course, and is done to assure that students are acquiring the appropriate academic and clinical competencies expected for this area of study. The assessment may use one or more of the following to determine each student’s competencies: paper and pencil tests; laboratory exercises; 2-page papers; and/or written analysis, descriptions, and treatment plans for mock patient data. Where appropriate, textbooks, Journal articles, study guides, illustrations, videotapes, and fellow class members may be used in these assessment procedures. Each student is expected to demonstrate at least 80% accuracy on the knowledge and skills assessed in each module. If any student fails to achieve the 80% criterion level on each module exam, a second examination will be required. Study guides and reading assignments appropriate for the area to be tested will be provided to help the student prepare for the second examination. The second examination may be a paper and pencil test, a paper, a case study, or a laboratory demonstration. The second test must be completed within two weeks following the initial examination. The ASHA standard met by successfully completing the competencies stated in each of the modules is identified.

CSD 552 – Neurogenic Communication Disorders III –Motor Speech Disorders

Instructor: Wayne E. Swisher, Ph.D.

Module I - Neurological Basis of Speech Production and Control (Std. III-B; III-C)

1. The student will be able to outline and describe the anatomical and functional components of the central and peripheral nervous system.

2. The student will be able to identify and describe the motor and sensory components of
the central nervous system that are important in the initiation and control of speech.

3. The student will be able to outline and describe the contribution of the pyramidal and extrapyramidal motor pathways to the initiation and control of speech.

4. The student will be able to provide the **name** and **function** for the 12 pair of cranial nerves.

5. The student will be able to identify those cranial nerves most important for speech and describe the contribution of each one to speech production and control.

6. The student will be able to outline and describe the contribution of sensory input to the initiation and control of speech.

7. The student will be able to describe the development of the neurological substrate used in the initiation and control of speech.

8. The student will be able to describe the relationship between the development of the neurological substrate important in the initiation and control of speech, and the development of speech.

9. The student will be able to describe the sensory and motor neurological network required to maintain normal speech.

**Module II - Neurological Damage and Speech Production Problems (Std. III-C; III-D; IV-B; IV-G)**

10. The student will be able to describe the relationship between the site of lesion in the nervous system and speech motor initiation and control problems.

11. The student will be able to differentiate motor initiation problems from motor control problems.

12. The student will be able to describe the neuromuscular conditions associated with each site of neurological lesion.

13. The student will be able to describe each type of dysarthria and its site of lesion in the nervous system.

14. The student will be able to identify motor speech disorders as belonging to a common class of speech problems and can identify the neurological and perceptual characteristics of each type of dysarthria.

**Module III - The Dysarthria Types- Clinical Manifestation and Pathophysiology Of**
DYSARTHRIA, re: Darley, Aronson, Brown (Mayo Clinic Classification of Dysarthria) (III-C; III-D)

15. The student will be able to identify each type of dysarthria and describe the perceptual and physiological characteristics of each type as described by Darley, et al.

Module IV - Neurological Diseases and Lesions Associated with Motor Speech Disorders (III-C; III-D)

16. The student will be able to describe the etiology, progression, prognosis, and pathophysiology of each neurological disease and insult that can result in dysarthria.

17. The student will be able to describe the site of lesion(s) within the nervous system, the clinical signs, the perceptual characteristics of the speech, and the type of dysarthria associated with each of the diseases and insults identified above.

Module V – Acquired Apraxia (III-C; III-D; IV-B)

18. The student will be able to identify the neurological site of lesion associated with acquired apraxia.

19. The student will be able to describe the pathophysiology of acquired apraxia of speech and relate it to the speech characteristics of apraxia.

20. The student will be able to differentiate apraxia from dysarthria using clinical signs including speech characteristics and neuromuscular behavior.

Module VI - Neurodiagnostics and Dysarthria and Apraxia (III-D; IV-B)

21. The student will be able to describe each of the neurodiagnostic procedures identified above and identify the strengths and weaknesses of each one as a diagnostic imaging technique for identifying site of lesion for dysarthria and/or apraxia.

Module VII. Assessment and Intervention Strategies for Dysarthria and Apraxia of Speech (III-D; IV-B; IV-G)

22. The student will be able to outline a diagnostic procedure (speech, neurological), and provide a rationale for each step or phase of the evaluation, for a patient presenting with symptoms of a motor speech disorder.

23. The student will be able to identify those clinical signs from the mock patient data that are critical to the accurate diagnosis of dysarthria type, apraxia, and dysarthria vs. apraxia and the point of breakdown in the speech production system.
24. The student will be able to provide an accurate diagnosis for dysarthria and/or apraxia based on the assessment data provided from the mock patient data.

25. The student will be able to provide an accurate severity rating and prognosis from the assessment data derived from the mock patient evaluation.

26. The student will be able to outline general speech therapy goals for the patient from whom the assessment data was collected.

27. The student will be able to outline specific speech therapy goals and procedures for each dimension of the patient’s speech that will need intervention.

28. The student will be able to write a diagnostic report appropriate for a medical referral.

29. The student will be able to write a progress report incorporating therapy goals, procedures, and outcome measures used to assess the mock patient’s progress in therapy.

CSD 562: Augmentative/Alternative Communication

Instructor: Wayne E. Swisher, Ph.D.

Module I - Introduction and Overview of Augmentative Communication (Std. III-C)

1. The student will be able to identify etiologic conditions that might require use of an AAC system or device.
2. The student will be able to define the terminology important in the study and application of AAC technology to the communicatively impaired individual.

Module II - Communication Systems and Their Components (Std. III-C; III-D: IV-G)

3. The student will be able to compare and contrast the symbols that can be used in AAC systems.
4. The student will be able to differentiate between direct selection and scanning procedures in AAC devices and discuss when to use each.
5. The student will be able to differentiate between static and dynamic displays in AAC devices and when to use each.
1. The student will be able to describe examples of high and low tech AAC systems and when each one might be used and explain why.
2. The student will be able to differentiate between aided and unaided AAC intervention.

Module III - Principles of Assessment and Phases of Assessment (Std. III-C; III-D: IV-G)
8. The student will be able to discuss the various assessment models and determine which one is most appropriate for the potential AAC user being evaluated.

9. The student will be able to describe and outline the appropriate assessment for an individual (child or adult) with developmental disorders who may be a potential AAC user.

10. The student will be able to describe and outline the appropriate assessment for an individual (child or adult) with acquired disorders who may be a potential AAC user.

11. The student will be able to discuss the importance of consensus building in making decisions about AAC use and the AAC user.

Module IV - Participation Patterns and Communication Needs Assessment ((Std. III-C; III-D: IV-G))

12. The student will be able describe participation and access barriers to the successful use of AAC.

Module V - Assessment of Specific Capabilities ((Std. III-C; III-D: IV-G))

13. The student will be able to describe the neuroanatomical and physiological factors important in doing an evaluation for the potential AAC user.

14. The student will be able to discuss those psychological and social factors important in the assessment and intervention strategies for the potential AAC user.

15. The student will be able to describe the assessment of cognitive and linguistic capabilities in the potential AAC user. The student will be able to compare and contrast maximal, criteria-based, and predictive assessment procedures for the potential AAC user.

Module VI - Principles of Decision Making and Intervention ((Std. III-C; III-D: IV-G))

Module VII - Measuring and Evaluating Intervention Outcomes ((Std. III-C; III-D: IV-G))

17. The student will be able to identify and measure appropriate outcome data to determine effectiveness of AAC intervention strategies.

Module VIII - AAC Intervention – Strategies, Populations, and Outcomes

Module IX - AAC for Beginning Communicators – opportunities and non-symbolic communication ((Std. III-C; III-D: IV-G))

Module X - AAC for Beginning Communicators- Symbolic approaches to communication ((Std. III-C; III-D: IV-G))

18. The student will be able to develop vocabulary and messages appropriate to the potential AAC user’s age and social/educational needs for both symbolic and non-symbolic communication. 19. The student will be able to describe the strategies to use in teaching language to the potential AAC user, both symbolic and non-symbolic.
Module XI- Language Learning and Development in AAC Users ((Std. III-C; III-D: IV-G))

20. The student will be able to develop goals, procedures, and teaching strategies used in teaching language structure and use to the AAC user.

Module XII- Intervention to Support Language in AAC Users ((Std. III-C; III-D: IV-G))

21. The student will be able to develop goals, procedures, and teaching strategies used in supporting the ongoing use and growth of language for the AAC user.

Module XIII- Building Communicative Competence ((Std. III-C; III-D: IV-G))

CSD 583 ADVANCED DIAGNOSTIC PROCEDURES

KNOWLEDGE OUTCOMES: ASHA STANDARDS IV-B, G-1, and G2

Students who satisfactorily (grade C or above) complete the course can expect to achieve the knowledge outcomes listed below:

The student will:
• understand diagnosis as a problem-solving process with the goal of recognizing the nature, extent and consequence of communication disorders.
• understand the strengths and weaknesses of formal versus informal approaches, norm referenced versus criterion referenced tests, and a standardized versus ethnographic approach to assessment.
• understand the collaborative, transdisciplinary issues and processes used in diagnosing communication disorders
• have the opportunity to interact with professionals from other agencies regarding the diagnostic process, as can be arranged by the instructors.

SKILL OUTCOMES

Students who satisfactorily (grade C or above) can expect to achieve the skills outcomes listed below:

The student will:
• be able to develop an appropriate diagnostic plan for client.
• be able to conduct an interview and to use other tools such as profiles and checklists that are appropriate for the age, education, and cultural background of the client/parent.

• be able to evaluate testing procedures and materials with regard to appropriateness of use with various age, language, and cultural groups.

• be able to evaluate testing procedures and materials with regard to appropriateness of use with various types of disorders.

• be able to differentiate between a communication variation and a disorder including knowledge of characteristics of second-language acquisition as well as nonstandard dialects.

• be able to describe and interpret test results and observations, synthesize case history information with other findings, evaluate etiological and prognostic factors, and make appropriate referrals.

• be able to write a comprehensive diagnostic report that can be read and interpreted by professionals as well as non-professional individuals.

• be able to communicate results and recommendations to clients, parents and professionals and to follow up with the appropriate counseling needed so that the client or others can make appropriate decisions based on the diagnosis.
I. MISSION STATEMENT

The larger mission of the Department of Communication Sciences and Disorders (CSD) is to provide its students with a liberal arts education through the College of Arts and Sciences, including instruction in the arts and sciences, communication skills, habits of independent thought, and the understanding of diverse cultures. The specific mission of CSD is to provide academic and clinical instruction, supervised clinical practica, and research experience for students that will lead to state, regional and national accreditation and licensing; to provide clinical services to individuals, groups and agencies within the University and the greater Grand Forks area; to provide professional leadership in local, state, and national organizations; to contribute to the body of knowledge concerning communication sciences and communication disorders; and to serve the University through participation in its governance. This mission is directed at meeting the interests and needs of the University of North Dakota constituency.

The Undergraduate Major

The undergraduate coursework in CSD is grounded in a liberal arts education. The undergraduate degree is designed to prepare the student to become a lifelong learner, a critical thinker, and a problem solver. The coursework also is designed to prepare the undergraduate major to pursue graduate work.

The Master’s Degree Program

A master’s degree in speech-language pathology is required for professional certification in the field of speech-language pathology. The master’s degree program at UND has been accredited by the Council on Academic Accreditation in Speech-Language Pathology and Audiology of the American Speech-Language and Hearing Association (ASHA).

The Ph.D. Program

This program provides a program of study in normal and disordered speech, language, and hearing, with an emphasis on the acquisition of research skills, that prepares the student for employment in a variety of settings including university teaching and research, clinical services and research, and research and/or consultation in industry.

II. Student Learning Goals and Objectives and Their Link to Coursework: the KASA Form

The basis of CSD’s learning goals and objectives are the 2005-mandated ASHA standards for critical knowledge and skills necessary for the practice of speech-language pathology. These standards outline the knowledge and skills that are expected of all students completing a master’s degree in accredited programs in speech-language
pathology. The standards are listed (i.e., Standard III-A, Standard III-B, etc.) in the accompanying form, titled ASSESSMENT OF KNOWLEDGE AND SKILLS SUMMARY (referred to as the KASA form in the field and in the rest of this document).

Each student has a KASA form in his/her file, and the KASA form serves as a record that tracks each student’s progress through the CSD curriculum, both at the undergraduate and graduate levels. As the student successfully moves through the curriculum and completes the coursework that satisfies each standard, that standard is checked off.

The content of CSD courses is in the great majority of cases aimed at satisfying the various AHSA standards. Each course syllabus lists the specific objectives, outcomes, and assessment methods and criteria for that course. A listing of the specific objectives and outcomes for each course is listed in the CSD Learning Outcomes. Most courses include objectives and outcomes that apply to several ASHA standards. The KASA form ties the course objectives to the ASHA standards by listing, under each standard, the various courses that contain objectives and outcomes that satisfy the standard.

The ASHA standards mandate the acquisition of a large body of knowledge and skills that is gained through both undergraduate and graduate course work. A student who obtains a master’s in speech-language pathology in reality has spent the better part of two years of undergraduate education as well as two years of graduate education obtaining the necessary course work. This is reflected in the KASA form, which lists both undergraduate and graduate courses. Thus, an assessment plan for CSD must include both undergraduate and graduate course work.

III. Specific Assessment Methods for Learning Outcomes

The ASHA standards require that CSD specify its assessment methods for the various learning outcomes, its criteria for having successfully achieved learning objectives and outcomes, and, in addition, its remediation procedures for students who have not met the assessment criteria. Students are not given credit for having met a particular standard until assessment criteria for that standard have been met. Assessment methods and criteria are stated in the course syllabi, as are remediation processes. The latter involve, in general, reviewing course material and re-examination or re-doing assignments. A listing of the specific assessment methods, assessment criteria, and remediation processes is provided in the CSD Learning Outcomes.

IV. Data Collection, Analysis, and Documentation

At the end of each semester, each instructor will generate a list for each course taught, indicating (1) which students have met assessment criteria without remediation, (2) which students have met assessment criteria with remediation, and (3) which students have not met the assessment criteria for each of their courses. The instructor will send these lists to the CSD administrative secretary, who will note these results with their dates on the students’ KASA forms wherever the course appears on the form. As the student fulfills the coursework requirements for the ASHA standards on the KASA form, these standards
will be checked off and dated. Thus, the KASA forms will provide a running, comprehensive record of students’ achievement of the learning goals for all courses.

The major data analysis planned is that described in (1) below. Those in (2), (3) and (4) may be used. Others may be used as the need arises.

(1) Aggregate data will be compiled by the department’s administrative secretary listing the proportion of students that are meeting the individual course learning goals without remediation, the proportion of students that are meeting individual learning course goals with remediation, and the proportion of students that are not meeting learning course goals. A yearly summary of the data from this analysis for all courses will be compiled by the administrative secretary in May and distributed to the faculty at the beginning of the following academic year.

(2) A finer-grained analysis of these data, indicating exactly which course goals need remediation or are not being met can be obtained, if regarded as useful in certain instances, by asking instructors to analyze their records.

(3) Advisors will be asked to review achievement data for individual students to monitor their progress.

(4) Aggregate data for courses under any ASHA standard or area of the curriculum can be compiled for curriculum planning purposes.

(5) Other useful byproducts can be extracted from the KASA data. For example, it will be possible to determine the total number of students completing all courses listed on the KASA form for each semester.

V. Other Assessment Tools

Clinical Evaluations: CSD uses the following methods of assessing students’ clinical skills.

(1) CSD clinic supervisors provide extensive written evaluations of student clinic performance. These evaluations are done in mid-semester and at the end of the semester and become part of the student’s file. The evaluations are used in both undergraduate and graduate clinical practica.

(2) Questionnaires concerning the performance of student clinicians are sent to external site supervisors. (All CSD students in the master’s program complete externships at hospitals and clinics in this area and elsewhere.) The questionnaires provide feedback on both the students’ performance and their training. They are currently kept in the files of the clinic coordinator.

The records alluded to in (1) and (2) will be analyzed by the clinic coordinator to determine strengths and weaknesses in the clinical curriculum at the end of the academic year.
Comprehensive Examinations: master’s students complete a series of comprehensive examinations in the various areas of the curriculum (e.g., fluency, phonatory disorders, etc.) Exam criteria are established by the faculty member responsible for the area of the curriculum examined. Students must retake examinations in cases where performance is not satisfactory. Faculty will be asked to summarize the examination results in their respective areas and forward these to the chair.

Thesis/Independent Studies: All master’s students write theses and independent studies under the direction of the graduate faculty. These projects can yield significant information about the research and writing skills of the master’s students. Thesis and independent study advisors will be asked to present reports summarizing the research and writing skills of the students who complete these projects under their supervision.

VI. How the Assessment Results will be Used

A faculty meeting, held at the beginning of the academic year, will be dedicated to the presentation and discussion of the assessment data from the previous academic year. At that time the faculty will decide whether the data warrant program changes. The data will include the following:

(1) The KASA form data.

(2) The clinic skills data.

(3) The comprehensive examinations data.

(4) The thesis/independent study data.
ASSESSMENT OF KNOWLEDGE AND SKILLS
SUMMARY
Department of Communication Sciences and Disorders
University of North Dakota
M.S. Program in Speech-Language Pathology

Name: ________________________________________

In order to fulfill requirements for the ASHA Certificate of Clinical Competence (CCC), a record must be maintained showing students’ progress in achieving the knowledge and skills that are expected of all students completing a master’s degree in CSD. An updated copy of the record for each graduate semester completed must be placed in the student’s file by the fourth week of each subsequent semester. A copy of the completed record must be in the student’s file as a requirement for graduation.

KNOWLEDGE OUTCOMES

The CSD administrative secretary will note when at course listed under the various standards has been successfully completed. Successful completion means that the criterion score for achievement for the course has been met. As the student fulfills the coursework requirements for the ASHA standards, these standards will be checked off. For a list of the learning outcomes and assessments, and the standards to which they apply, please refer to the performance outcomes and assessments accompanying the syllabi for each course listed below.

Standard III-A: The applicant must demonstrate a knowledge of the principles of biological sciences, physical sciences, mathematics, and the social/behavioral sciences.

Official transcript in student’s file in the CSD office includes at least three semester hours of credit at the college level (non-remedial) in each of the following:

<table>
<thead>
<tr>
<th>Category</th>
<th>Course Title</th>
<th>Semester:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological sciences</td>
<td></td>
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<tr>
<td>Physical sciences</td>
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<td></td>
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<tr>
<td>Social/behavioral sciences</td>
<td></td>
<td></td>
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<tr>
<td>Mathematics (including statistics)</td>
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</tbody>
</table>

30 March 2005
Standard III-B. The applicant must demonstrate a knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. **Specific knowledge must be demonstrated in the following areas:**

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-B-1: Biological</td>
<td>231 322 35 422</td>
</tr>
<tr>
<td>III-B-2: Neurological</td>
<td>231 322 35 422</td>
</tr>
<tr>
<td>III-B-3: Acoustic</td>
<td>223 322 35 538</td>
</tr>
<tr>
<td>III-B-4: Psychological</td>
<td>232 365 382</td>
</tr>
<tr>
<td>III-B-5: Developmental</td>
<td>223 322 333 343</td>
</tr>
<tr>
<td>III-B-6: Linguistic and Cultural</td>
<td>223 322 333 343 425</td>
</tr>
</tbody>
</table>

Standard III-C. The applicant must demonstrate a knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including their etiologies and characteristics, their anatomical/physiological bases, and their acoustic, psychological, developmental, and linguistic and cultural correlates. **Specific knowledge must be demonstrated in the following areas:**

### III-C-1: Articulation.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-C-1a: etiologies</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1b: characteristics</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1c: anatomical/physiological</td>
<td>232 333 552</td>
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<tr>
<td>III-C-1d: acoustic</td>
<td>232 333 552</td>
</tr>
<tr>
<td>III-C-1e: psychological</td>
<td>232 333 552 440</td>
</tr>
<tr>
<td>III-C-1f: developmental</td>
<td>232 333 440 441 552</td>
</tr>
<tr>
<td>III-C-1g: linguistic and cultural</td>
<td>232 333 440 441 552</td>
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</tbody>
</table>
### III-C-2: Fluency.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Courses</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-C-1a: etiologies</td>
<td>232</td>
<td>536</td>
</tr>
<tr>
<td>III-C-2b: characteristics</td>
<td>536</td>
<td></td>
</tr>
<tr>
<td>III-C-2c: anatomical/physiological</td>
<td>536</td>
<td></td>
</tr>
<tr>
<td>III-C-2d: psychological</td>
<td>232</td>
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<tr>
<td>III-C-2e: developmental</td>
<td>232</td>
<td>536</td>
</tr>
<tr>
<td>III-C-2f: linguistic and cultural</td>
<td>536</td>
<td></td>
</tr>
</tbody>
</table>

### III-C-3: Voice and Resonance, including respiration and phonation.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Courses</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-C-3a: etiologies</td>
<td>538</td>
<td>552</td>
</tr>
<tr>
<td>III-C-3b: characteristics</td>
<td>232</td>
<td>538</td>
</tr>
<tr>
<td>III-C-3c: anatomical/physiological</td>
<td>538</td>
<td>552</td>
</tr>
<tr>
<td>III-C-3d: acoustic</td>
<td>232</td>
<td>538</td>
</tr>
<tr>
<td>III-C-3e: psychological</td>
<td>232</td>
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</tbody>
</table>

### III-C-4: Receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities.

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Courses</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-C-4a: etiologies</td>
<td>363</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td></td>
<td>562</td>
</tr>
<tr>
<td>III-C-4b: characteristics</td>
<td>363</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td></td>
<td>562</td>
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<tr>
<td>III-C-4c: anatomical/physiological</td>
<td>440</td>
<td>441</td>
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<tr>
<td>III-C-4d: psychological</td>
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<td>440</td>
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<td>562</td>
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<tr>
<td>III-C-4e: developmental</td>
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<td>III-C-4f: linguistic and cultural</td>
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<td>440</td>
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</table>
### III-C-5: Hearing, including the impact on speech and language.

<table>
<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
<td>III-C-5a: etiologies</td>
<td>232 363 365 431 531</td>
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<tr>
<td>III-C-5b: characteristics</td>
<td>232 363 365 431 531</td>
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<tr>
<td>III-C-5c: anatomical/physiological</td>
<td>232 363 431 531</td>
</tr>
<tr>
<td>III-C-5d: acoustic</td>
<td>232 363 431 531</td>
</tr>
<tr>
<td>III-C-5e: psychological</td>
<td>232 363 365 431 531</td>
</tr>
<tr>
<td>III-C-5f: developmental</td>
<td>232 363 431 531</td>
</tr>
<tr>
<td>III-C-5g: linguistic and cultural</td>
<td>232 363 431 531</td>
</tr>
</tbody>
</table>

### III-C-6: Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding; orofacial myofunction).

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<th>Courses</th>
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<tbody>
<tr>
<td>III-C-6a: etiologies</td>
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</tr>
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<td>III-C-6b: characteristics</td>
<td>365 542 552 553</td>
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<tr>
<td>III-C-6c: anatomical/physiological</td>
<td>365 542 552 553</td>
</tr>
<tr>
<td>III-C-6d: psychological</td>
<td>365 542 552 553</td>
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<td>III-C-6e: developmental</td>
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### III-C-7: Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning).

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<thead>
<tr>
<th>Courses</th>
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<tbody>
<tr>
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<td>365 501 532 533 552</td>
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<td>III-C-7b: characteristics</td>
<td>365 501 532 533 552</td>
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<tr>
<td>III-C-7c: anatomical/physiological</td>
<td>501 532 533 552</td>
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<tr>
<td>III-C-7d: psychological</td>
<td>365 501 532 533 552</td>
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<tr>
<td>III-C-7e: developmental</td>
<td>501 532 533 552</td>
</tr>
<tr>
<td>III-C-7f: linguistic and cultural</td>
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</table>
III-C-8: Social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities).

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<tr>
<th>Courses</th>
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<tbody>
<tr>
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<td>III-C-8b: characteristics</td>
<td>365 533 562</td>
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<td>III-C-8e: linguistic and cultural</td>
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III-C-9: Communication modalities (including oral, manual, augmentative, and alternative communication techniques and assistive technologies).

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<tr>
<th>Courses</th>
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<tbody>
<tr>
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<td>365 562</td>
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<td>III-C-9b: characteristics</td>
<td>434 562</td>
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<tr>
<td>III-C-9c: anatomical/physiological</td>
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<tr>
<td>III-C-9d: psychological</td>
<td>365 434 562</td>
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<tr>
<td>III-C-9e: developmental</td>
<td>434 562</td>
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<tr>
<td>III-C-9f: linguistic and cultural</td>
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</tbody>
</table>

Standard III-D: The applicant must possess a knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of the anatomical/physiological (AP), psychological (P), developmental (D), and linguistic and cultural (CLD) correlates of the disorders. Specific knowledge must be demonstrated in the following areas: [The course syllabi specify how and where the various bases (AP, P, etc.) are addressed.]

III-D-1: Articulation

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-D-1a: Prevention</td>
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</tr>
<tr>
<td>III-D-1b: Assessment</td>
<td>333 T&amp;L 400 552 583</td>
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<tr>
<td>III-D-1c: Intervention</td>
<td>333 T&amp;L 400 552</td>
</tr>
</tbody>
</table>
### III-D-2: Fluency.

<table>
<thead>
<tr>
<th>Section</th>
<th>Courses/ experiences</th>
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</thead>
<tbody>
<tr>
<td>III-D-2a: Prevention</td>
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<td></td>
</tr>
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<td>III-D-2b: Assessment</td>
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<td></td>
</tr>
<tr>
<td>III-D-2c: Intervention</td>
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### III-D-3: Voice and Resonance, including respiration and phonation.

<table>
<thead>
<tr>
<th>Section</th>
<th>Courses/ experiences</th>
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</thead>
<tbody>
<tr>
<td>III-D-3a: Prevention</td>
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<tr>
<td>III-D-3b: Assessment</td>
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</tr>
<tr>
<td>III-D-3c: Intervention</td>
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</table>

### III-D-4: Receptive and expressive language (phonology, morphology, syntax, semantics, and pragmatics) in speaking, listening, reading, writing, and manual modalities.

<table>
<thead>
<tr>
<th>Section</th>
<th>Courses/ experience</th>
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<tbody>
<tr>
<td>III-D-4a: Prevention</td>
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<td>III-D-4b: Assessment</td>
<td>T&amp;L 400</td>
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<td>III-D-4c: Intervention</td>
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### III-D-5: Hearing, including the impact on speech and language.

<table>
<thead>
<tr>
<th>Section</th>
<th>Courses/ experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-D-5a: Prevention</td>
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<td>III-D-5b: Assessment</td>
<td>431 434 531 T&amp;L 400</td>
<td></td>
</tr>
<tr>
<td>III-D-5c: Intervention</td>
<td>431 434 531 T&amp;L 400</td>
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### III-D-6: Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function For feeding; orofacial myofunction).

<table>
<thead>
<tr>
<th>Section</th>
<th>Courses/ experiences</th>
<th>Met</th>
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<tbody>
<tr>
<td>III-D-6a: Prevention</td>
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<td>III-D-6b: Assessment</td>
<td>553</td>
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<td>III-D-6c: Intervention</td>
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</table>
### III-D-7: Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning).

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<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
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<tbody>
<tr>
<td>III-D-7a: Prevention</td>
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<tr>
<td>III-D-7b: Assessment</td>
<td>501 532 533</td>
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<tr>
<td>III-D-7c: Intervention</td>
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</table>

### III-D-8: Social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities).

<table>
<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
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<tbody>
<tr>
<td>III-D-8a: Prevention</td>
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<td></td>
</tr>
<tr>
<td>III-D-8b: Assessment</td>
<td>382 533</td>
<td></td>
</tr>
<tr>
<td>III-D-8c: Intervention</td>
<td>382 533</td>
<td></td>
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### III-D-9: Communication modalities (including oral, manual, augmentative, and alternative communication techniques and assistive technologies).

<table>
<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-D-9a: Assessment</td>
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<td></td>
</tr>
<tr>
<td>III-D-9b: Intervention</td>
<td>562</td>
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</table>

### Standard III-E: The applicant must demonstrate knowledge of standards of ethical conduct.

<table>
<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-E: Knowledge of standards of ethical conduct</td>
<td>382 484 485 525 584 585</td>
<td></td>
</tr>
</tbody>
</table>

### Standard III-F: The applicant must demonstrate knowledge of processes used in research and the integration of research principles into evidence-based clinical practice.

<table>
<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>III-F: Research &amp; integration of research &amp; clinic</td>
<td>525 533 584</td>
<td></td>
</tr>
</tbody>
</table>

### Standard III-G: The applicant must demonstrate knowledge of contemporary professional issues.

<table>
<thead>
<tr>
<th></th>
<th>Courses/ experiences</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-G: Knowledge of professional issues</td>
<td>382 583 584</td>
<td></td>
</tr>
</tbody>
</table>
Standard III-H: The applicant must demonstrate knowledge about certification, specialty recognition, licensure, and other relevant professional credentials.

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>III-H: Knowledge of certification</td>
<td>232 382 T&amp;L 400 584</td>
</tr>
</tbody>
</table>

STANDARD IV: PROGRAM OF STUDY—SKILLS OUTCOMES

Standard IV-B: The applicant must possess skill in oral and written or other forms of communication sufficient for entry into professional practice.

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-B-1: Oral Communication</td>
<td>525 536 583 584</td>
</tr>
<tr>
<td>IV-B-2: Written Communication</td>
<td>484 485 525 533 536 583 584</td>
</tr>
</tbody>
</table>

Standard IV-C: The applicant for certification in speech-language pathology must complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and 375 hours must be spent in direct client/patient contact.

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV-C-1: Number of Observation Hours</td>
<td>484 485</td>
</tr>
<tr>
<td>IV-C-2: Number of direct client contact</td>
<td>584 585</td>
</tr>
</tbody>
</table>

Standard IV-D: At least 325 of the 400 clock hours must be completed while the applicant is engaged in graduate study in a program accredited in speech-language pathology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. The student will complete at least 325 clock hours at the graduate level.

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>IV-D: Clock hours per semester</td>
<td>584 585</td>
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</tbody>
</table>
Standard IV-F: Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.

<table>
<thead>
<tr>
<th>Standard IV-F Courses/experiences</th>
<th>Met</th>
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</thead>
<tbody>
<tr>
<td>IV-F-1: Child</td>
<td>584 585</td>
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<tr>
<td>IV-F-2: Adult</td>
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<tr>
<td>IV-F-3: Culturally / Linguistically Diverse</td>
<td>584 585</td>
</tr>
<tr>
<td>IV-F-4: Articulation</td>
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</tr>
<tr>
<td>IV-F-5: Fluency</td>
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<tr>
<td>IV-F-6: Voice &amp; Resonance incl. resp. &amp; phon.</td>
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<tr>
<td>IV-F-7: Receptive and expressive language</td>
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<tr>
<td>IV-F-8: Hearing, incl impact on speech &amp; lang.</td>
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<tr>
<td>IV-F-9: Swallowing</td>
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<tr>
<td>IV-F-10: Cognitive aspects of communication</td>
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<tr>
<td>IV-F-11: Social aspects of communication</td>
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<tr>
<td>IV-F-12: Communication modalities</td>
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</tbody>
</table>

Standard IV-G: The applicant for certification must complete a program of study that includes supervised clinical experiences sufficient in breadth and depth to achieve the following skills outcomes:

In addition to direct client/patient contact, clinical skills may be developed and demonstrated through successful performance on academic course work and examinations, application of information obtained through clinical experiences, and completion of independent projects. In instances where applicants have not had direct patient contact with disorder and difference categories, appropriate alternative methods for skills development must be demonstrated. The skills outcomes listed below are addressed in the course syllabi and clinical practicum records.

1. Evaluation:

Conduct screening and prevention procedures (including prevention activities).
Collect case history information and integrate information from clients/patients, family, caregivers, teachers, relevant others, and other professionals.
Select and administer appropriate evaluation procedures, such as behavioral observations, non-standardized and standardized tests, and instrumental procedures.
Adapt evaluation procedures to meet client/patient needs.
Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention.
Complete administrative and reporting functions necessary to support evaluation.
Refer clients/patients for appropriate services.
2. Intervention:

Develop setting-appropriate intervention plans with measurable and achievable goals that meet clients’/patients’ needs. Collaborate with clients/patients and relevant others in the planning process.

Implement intervention plans (Involve clients/patients and relevant others in the intervention process.

Select or develop and use appropriate materials and instrumentation for prevention and intervention.

Measure and evaluate clients’/patients’ performance and progress.

Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.

Complete administrative and reporting functions necessary to support intervention.

Identify and refer clients/patients for services as appropriate.

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<tr>
<th>Courses/ experiences</th>
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<tr>
<td>IV-G1a: Articulation</td>
<td>333 536 583</td>
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<td></td>
<td>584 585</td>
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<tr>
<td>IV-G1b: Fluency</td>
<td>536 583 584 585</td>
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<tr>
<td>IV-G1c: Voice &amp; Resonance, incl. respir. &amp; phon.</td>
<td>538 583 584 585</td>
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<tr>
<td>IV-G1d: Receptive and expressive language</td>
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<tr>
<td>IV-G1e: Hearing, incl. impact on speech &amp; lang.</td>
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<tr>
<td>IV-G1f: Swallowing</td>
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<tr>
<td>IV-G1g: Cognitive aspects of communication</td>
<td>501 532 542 552</td>
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<tr>
<td></td>
<td>583 584 585</td>
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<tr>
<td>IV-G1h: Social aspects of communication</td>
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<td>IV-G1i: Communication modalities</td>
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<th>Courses/ experiences</th>
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<tr>
<td>IV-G2b: Fluency</td>
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<tr>
<td>IV-G2c: Voice &amp; Resonance, incl. respir. &amp; phon.</td>
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<tr>
<td>IV-G2d: Receptive and expressive language</td>
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<td>584 585</td>
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<tr>
<td>IV-G2e: Hearing, incl. impact on speech &amp; lang.</td>
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<tr>
<td>IV-G2f: Swallowing</td>
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<tr>
<td>IV-G2g: Cognitive aspects of communication</td>
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3. Interaction and Personal Qualities:

Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.
Collaborate with other professionals in case management.
Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.
Adhere to the ASHA Code of Ethics and behave professionally.

<table>
<thead>
<tr>
<th>Courses/ experiences</th>
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<tbody>
<tr>
<td>IV-G-3a: Articulation</td>
<td>584 585</td>
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<tr>
<td>IV-G-3b: Fluency</td>
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<tr>
<td>IV-G-3c: Voice &amp; Resonance, incl. respir. &amp; phon.</td>
<td>584 585</td>
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<tr>
<td>IV-G-3d: Receptive and expressive language</td>
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<tr>
<td>IV-G-3e: Hearing, incl. impact on speech &amp; lang.</td>
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<tr>
<td>IV-G-3f: Swallowing</td>
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<tr>
<td>IV-G-3g: Cognitive aspects of communication</td>
<td>584 585</td>
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<tr>
<td>IV-G-3h: Social aspects of communication</td>
<td>584 585</td>
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<tr>
<td>IV-G-3i: Communication modalities</td>
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</tbody>
</table>

STANDARD V: ASSESSMENT
The applicant for certification must demonstrate successful achievement of the knowledge and skills delineated in Standard III and Standard IV by means of both formative and summative assessment.

Standard V-A: Formative Assessment

The applicant must meet the education program’s requirements for demonstrating satisfactory performance through ongoing formative assessment of knowledge and skills. (Fulfillment of requirements for previous standards entails fulfillment of this standard.)

<table>
<thead>
<tr>
<th>Date Met</th>
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<tbody>
<tr>
<td>V-A: Formative assessment requirements</td>
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</table>
Standard V-B: Summative Assessment

The applicant must pass the national examination adopted by ASHA for purposes of certification in speech-language pathology.

<table>
<thead>
<tr>
<th>Date Met</th>
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<tr>
<td>V-B: ASHA national exam passed:</td>
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