Last Updated: Haddad, Deborah Moore 04/04/2012

#### **Term Information**

Effective Term Autumn 2012

#### **General Information**

Course Bulletin Listing/Subject AreaSpeech and Hearing ScienceFiscal Unit/Academic OrgSpeech & Hearing - D0799

College/Academic GroupArts and SciencesLevel/CareerUndergraduate

Course Number/Catalog 4430

Course Title Introduction to Language Science and Language Disorders

Transcript Abbreviation Intro Language Sci

Course Description Foundational to understanding normal/disordered language development or language altered by

neurological disorders is the structure of language and associated cognitive processes. This course will associate the structure of language to principles in the assessment of language/disorders and treatment

of language disorders, developmental and acquired, across the life span.

Semester Credit Hours/Units Fixed: 3

#### Offering Information

Length Of Course 14 Week, 7 Week, 12 Week (May + Summer)

Flexibly Scheduled Course Never

Does any section of this course have a distance Yes

education component?

Is any section of the course offered 100% at a distance

Grading Basis Letter Grade

Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

#### **Prerequisites and Exclusions**

Prerequisites/Corequisites SHS 2230 (230), SHS 3330 (330) or their equivalents, or permission of the instructor

**Exclusions** None

#### **Cross-Listings**

**Cross-Listings** 

#### Subject/CIP Code

Subject/CIP Code 51.0201

Subsidy Level Baccalaureate Course

Intended Rank Junior, Senior

Last Updated: Haddad, Deborah Moore 04/04/2012

#### **Quarters to Semesters**

**Quarters to Semesters** 

New course

Give a rationale statement explaining the purpose of the new course

Measurement of language and related disorders across the life span is evolving to incorporate cognitive linguistic principles. The present course addresses the need to begin the education of SHS students in

these principles.

Sought concurrence from the following Fiscal Units or College

Department of Linguistics

#### Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

#### **Course Details**

#### Course goals or learning objectives/outcomes

- Define the basic structural levels and elements of a language
- Ability to analyze a sentence in terms of these levels and elements.

Know the difference between syntax and semantics and the roles that words play in a sentence.

- Ability to differentiate between syntax and semantics and the roles that words play in a sentence.
- Define the basic brain functions affecting language
- Describe the concept of neurological modelling of language and its impairment.
- Outline the basic approaches to experimental methodological considerations in pursing research in psycholinguistics, neurolinguistics and speech-language pathology.

#### **Content Topic List**

- Language
- Language Disorders
- Svntax
- Semantics
- Neurology of language
- Psycholinguistics

#### **Attachments**

LanguageScienceLanguageDisorders\_syllabus\_SP2013\_3\_28\_2012.docx

(Syllabus. Owner: Trudeau, Michael David)

ConcurrenceForm.jpg: Linguistics' concurrence

(Concurrence, Owner: Trudeau, Michael David)

#### Comments

 A revision of the Speech and Hearing Science baccalaureate is in preparation to reflect the inclusion of 4430 as part of the major program. (by Trudeau, Michael David on 04/04/2012 08:47 AM)

### **COURSE REQUEST** 4430 - Status: PENDING

Last Updated: Haddad, Deborah Moore 04/04/2012

#### **Workflow Information**

| Status           | User(s)   | Date/Time           | Step                   |
|------------------|---|---------------------|------------------------|
| Submitted        | Trudeau, Michael David  | 04/04/2012 08:48 AM | Submitted for Approval |
| Approved         | Fox,Robert Allen  | 04/04/2012 10:55 AM | Unit Approval          |
| Approved         | Haddad, Deborah Moore   | 04/04/2012 11:23 AM | College Approval       |
| Pending Approval | Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadet te Chantal Hogle,Danielle Nicole Hanlin,Deborah Kay | 04/04/2012 11:23 AM | ASCCAO Approval        |

# Speech and Hearing Science 4430 Introduction to Language Science and Language Disorders Autumn Semester 2013

Updated 3/29/2012

Credit Hours: 3

Course Level: Undergraduate

Schedule: MWF, 3:00-4:25 (PR 035)

Instructor: Robert A. Fox, Professor and Chair

Office: Pressey Hall, Room 110

Office Hours: M: 12:00-1:00, TR 2:00-3:00

Email address: fox.2@osu.edu

Dept. Phone: 292-8207 Dept. FAX: 292-7504

Course Description: A primary requirement for understanding normal language development, disordered language development and language disorders in children as well as neurogenic disorders in adults is having a firm grasp of the structure of language (and the underlying cognitive processes related to language processing). This course will provide a foundation in understanding elements of the structure of language (such as phonology, morphology, and syntactic/sematic structure), psycholinguistics and the background knowledge for understanding language assessment protocols. It will allow you to consider, among other things, the processes of first- and second-language acquisition and the nature of language delay/disorders in children; the nature of errors in language production (and what they tell us about the neural organization of language); and the types of language impairments you might find in individuals with acquired neurogenic language disorders.

Note: Although this is a 14-week course, we will "cover a lot of ground" in those 14 weeks. The best way to do well in this course is to read the assigned material <u>before</u> the lecture, pay attention during lectures and ask questions if you really don't follow what is being presented.

#### **ASHA Standards Addressed**

III-C: The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including the etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

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

#### **Learning Objectives/Knowledge Outcomes:**

#### Basic linguistics

- Understand the basic structural levels and elements of a language.
- Ability to analyze a sentence in terms of these levels and elements.
- Know the difference between syntax and semantics and the roles that words play in a sentence.

#### Brain function and modeling

- Descibe the basic nature of a "neural" event.
- Provide examples of bottom-up processing and top-down processing.
- Characterize spreading-activation models in word understanding.
- Outline language areas in the brain

#### Speech Errors

- Define the concept of speech error and describe possible sources for such errors.
- Describe the process of language and sentence production and organization of speech.

#### Experimental Methods

- Outline the basic approaches to experimental methodological considerations in pursing research in psycholinguistics, neurolinguistics and speech-language pathology.
- Outline the difference betwee speech production experiments and speech perception experiments.

#### Aphasic Speech

- Describe the nature and etiology of aphasic speech.
- Classify the different aphasias.
- Define brain plasticity and what it might mean to recovery from a stroke.
- Describe how one might assess language disorders in aphasic clients.

#### **Developmental Psycholinguistics**

- Describe the milestones of first language acquistion.
- Describe the differences and similarities between first and second language acquisition.
- Define language disorders and language delays and how we determine whether or not one exists in a given individual.
- What are the most common assessment tools used in determining presence of a language disorder or delay in children?

#### Reading/Literacy

- Define how reading is a psycholinguistic process.
- Describe the differences and similarities between reading and listening.
- Describe the role of the speech-language pathologist in terms of emergent reading and literacy.

**Required Text:** Menn, Lisa (2011). *Psycholinguistics: Introduction and Applications*. San Diego: Plural Publishing. (ISBN:-13: 978-1-59756-283-6, 486 pgs.). This text also includes a DVD with many figures, sound files, charts, etc. to complement the

information in each of the individual book chapters. Please make sure that you have a computer than can read from this DVD.

**Carmen Site:** There will be a Carmen site on which additional course materials will be placed. It will also serve as a source of information about course assignments and grades. Copies of power point presentations (.ppt files) will be available for each lecture. However, note that these .ppt files will <u>not</u> include all the information presented during a lecture, rather they only represent an outline of the lecture and a guide for notetaking.

**Grading:** There will be two midterm exams (each worth 100 points) and one **comprehensive** final exam (worth 150 points). There will also be a course project worth 100 points. Note: Only medical or emergency excuses (documented appropriately) will be accepted for missing an exam to consider allowing you to take a makeup exam. If such an excuse is not available, the grade for the missed exam will be 0 and no make-up exam will be allowed. If you miss the final exam without an approved medical excuse, your grade for the course will be "E." The course project will require you to write a short term paper on a specific topic (this topic to be selected and approved by the 5<sup>th</sup> week of the course). The paper topic should be narrowly focused and contain references to primary source material (e.g., journal articles, not internet sites). Specific information regarding the format of the project will be provided. Although class attendance will not be taken, you are expected to attend every class meeting as you are responsible for all information provided during the lectures (see note above re: the .ppt files provided on Carmen).

Your final course grade will thus be based on the following:

| Exam 1         | 100 |
|----------------|-----|
| Exam 2         | 100 |
| Final Exam     | 150 |
| Course Project | 100 |
|                |     |

#### Total possible points: 450

Letter grades will be assigned based on the standard ranges as follows: 93-100% A, 90-92% A-, 87-89% B+, 83-86% B, 80-82% B-, etc. Rounding rule used: a .5% will be rounded up, anything less (including .49%) is rounded down. So 92.5% to 92.9% is rounded up to 93%; 92.1% to 92.4% is rounded down to 92%.

#### A few notes and helpful hints:

- Please do not hesitate to ask questions either during the lecture or during office hours.
- However, please do not talk while I am giving a lecture, as it is disruptive to the class (and distressing to me).
- Let me know if you are having difficulty with any of the material.

• Remember, most if not all learned human activity improves with practice (and doesn't improve without practice) and that includes understanding the course materials and linguistic analysis.

Use of Portable Electronic Devices (e.g., cell phones, blackberries, etc.) during Class: There will be no use of most portable electronic devices during the lecture period. Cell phones and pagers must be turned off (and not just set to "vibrate") prior to the start of class and put away. They may be turned on again only after class is dismissed.

**Use of Laptops:** The use of laptops is permitted during class for note taking purposes only provided the following rules are adhered to:

- Charge your laptop batteries fully before coming to class (there will not be sufficient electrical outlets to provide power to laptops in the classroom).
- Set your laptop volume control to mute or off before coming to class.
- Keep your laptop closed during presentations and other specific in-class activities.
- Do not engage in unauthorized communication or entertainment (web surfing, instant messaging, chat room chatting, DVD viewing, music playing, game playing, checking e-mail, etc.) during class unless it is part of the lesson.

Because improper use of laptops is distracting to all members of the class, if any student is found using their laptop in an inappropriate way, use of laptops will not be allowed in subsequent class meetings. .

Academic Misconduct: The University's Code of Student Conduct defines academic misconduct as "[a]ny activity that tends to compromise the academic integrity of the University, or subvert the educational process." If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me. Some examples of academic misconduct include (but are not limited to): plagiarism, knowingly providing or receiving information during an exam or assignment, and violating the course rules.

Students with Disabilities: THIS PUBLICATION/MATERIAL IS AVAILABLE IN ALTERNATIVE FORMATS UPON REQUEST. PLEASE CONTACT ME FOR THE NECESSARY ARRANGEMENTS. STUDENTS WITH DISABILITIES ARE RESPONSIBLE FOR MAKING THEIR NEEDS KNOWN TO THE INSTRUCTOR AS SOON AS THE QUARTER BEGINS,

# AND ARE RESPONSIBLE FOR SEEKING AVAILABLE ASSISTANCE FROM THE OFFICE OF DISABILITY SERVICES 292-3307, PRIOR TO OR AT THE BEGINNING OF THE QUARTER. I RELY ON THE OFFICE FOR DISABILITY SERVICES FOR ASSISTANCE IN VERIFYING THE NEED FOR ACCOMMODATIONS AND DEVELOPING ACCOMMODATION STRATEGIES.

#### **Course Outline:**

There are 11 separate units in this course.

| Unit 1  | Basic introduction to the course, outline of requirements, expectations, |
|---------|--|
| 8/23/12 | resources (both at the university and on the ASHA website)               |

Readings: Menn, pgs. xiii-xix

# Unit 2 8/28/128/30/12 Basic linguistics: How to describe language use and language knowledge. In this unit, we address issues related to terminology, stages/level of linguistic analysis (from phonetic segments, to phonemes to morphemes, to phrases, to utterances). You will practice things such as calculating speech rate, MLUs, etc.

Readings: Menn, Chapter 1

Note: A nice book to expand your knowledge in this area if you have not taken a linguistics course is: Frank Parker & Kathryn Riley (2009) *Linguistics for Non-Linguistics*, 5<sup>th</sup> Edition, Pearson.

## Unit 3 How Brains work. We will address some very basic neuroanatomy, 9/4/12- and knowledge of neural processing; plus we will examine various approaches to modeling such activity and differentiating between bottom-up and top-down processing.

Reading: Menn, Chapter 2

#### Websites:

How the brain works. (commissioned for brain awareness week, an animated tour around the human brain)
How does the brain work? (PBS Nova special)

# Unit 4 Normal speech errors and how they happen. I. From idea to word. What is the nature of speech errors? These happen in both "normal" and "disordered" populations. What is the difference? We look at two different functional levels (lemmas and semantic function). We end by looking briefly at errors in aphasic speech.

Readings: Menn, Chapter 3

Websites:

The Slips Pages: Speech Error or Slips of the Tongue (from BGSU)

Voit 5
 9/18/12 9/20/12
 Normal speech errors and how they happen. II. Saying words and sounds in the right order. What is utterance planning? How do we go from relatively high level utterance plans to fluent speech? From where do errors in speech planning and/or utterance execution come? We end with a summary of sentence production.

Readings: Menn, Chapter 4

#### **Units 1-5** In-Class Review.

9/25/12

**Exam 1 In-Class Exam.** No notes, no laptops, no phones. Format of test to

9/27/12 be described during review session.

Unit 6
10/2/1210/4/12
Experimental studies of normal language production and comprehension: An introduction to experimental methods in psycholinguistics, neurolinguistics and speech-language pathology. We are interested in the nature of memory, speech production, speech perception, both normal and disordered cognitive processes. What questions and issues are important? On what theoretical, methodogical and statistical bases do we build our experimental programs? How do we interpret our results?

Readings: Menn, Chapter 5

### Unit 7 Analyzing aphasic speech and communication: The 10/11/12- psycholinguistics of adult acquired language disorders. Essential to speech-language pathologists is the nature of

Essential to speech-language pathologists is the nature of neurogenic language disorders in the adult population (particularly in individuals who have suffered strokes or have some other acquired disorder). In addition to the discussions in the Menn book, we will talk about assessment tests for this population along with a brief discussion of treatments. We will spend 3 classroom sessions on this topic.

Readings: Menn, Chapter 6

### Unit 8 Developmental psycholinguistics: Studies of first language 10/18/12- acquisition. Of course, at the early end of the age span we are most interested in the nature of first (and early second) language acquisition.

What is the nature of the earliest speech? How do we determine what is normal and what is disorders (or delayed) acquisition?

Readings: Menn, Chapter 7

#### **Units 6-8 In-Class Review**

10/25/12

11/20/12

**Exam 2** In-Class Exam. No notes, no laptops, no phones. Format of test to

10/27/12 be described during review session

#### Unit 9 The psycholinguistics of reading and learning to read.

11/1/12- Reading is a psycholinguistic process that can be challenging to 11/6/12 English learners given the complex relationship between orthogonal transfer of the complex relationship between orthogonal transfer or the complex relationship between orth

English learners given the complex relationship between orthography and phonological structure. We will examine the similarities and differences between reading and listening. In addition, we will address the responsibilities of the speech-language pathologist in terms of reading difficulties given renewed interest in our discipline on the relationship between literacy and spoken language (and disordered language)

Readings, Menn Chapter 8

#### Websites:

Emergent literacy skills and the role of the SLP (from ASHA)
Literacy Basics (from ASHA)
ASHA's Literacy Gateway

### Unit 10 First and second language acquisition: A psycholinguistic 11/8/12- approach to their similarities and differences. Naturally, an

understanding of expected stages of normal language development is Important for speech-language pathologists in order to separate normal from delayed (or disordered) development. However, given the increasingly multicultural nature of the United States (cultural and linguistic diversity) it is important to understand the nature of second language acquisition and its similarities (and differences) to first language acquisition. This portion of the course will cover each of these issues.

Readings, Menn, Chapter 9

No class meeting on 11/15/12 - ASHA Convention No class meeting on 11/22/12 - Thanksiving Day

#### Unit 11 Using psycholinguistics in testing, teaching and therapy

11/27/12- What is the relationship between psychometrics and language testing?

11/29/12 In this section we will discuss language assessment both from

the psycholinguistic perspective, but also from an applied clinical perspective. What constitutes a viable, ethical, linguistically and culturally valid test?

Readings: Menn, Chapter 10

#### **Course Review**

12/4/12

**Course** Course project must be put into the Carmen Dropbox by 12:00 p.m.

**Project** on 12/5/12.

Due

**Final Exam Comprehensive In-Class Exam.** No notes, no laptops, no phones. Format of Final Exam to be described during the course review session. Date/time of Final Exam determined by University Final Exam schedule—the date/time will not be changed; please check the date/time to make sure you do not arrange for vacations (or other personal holidays) as that would not be a valid excuse for missing the Final.

#### **Ohio State Department Course Review Concurrence Form**

The purpose of this form is to provide a simple system of obtaining departmental reactions to proposed new courses, group studies, study tours, workshop requests, and course changes. A letter may be substituted for this form.

Academic units initiating a request which requires such a reaction should complete Section A of this form and send a copy of the form, course request, and syllabus to each of the academic units that might have related interests in the course. Initiating units should allow at least two weeks for responses.

Academic units receiving this form should response to Section B and return the form to the initiating unit. Overlap of course content and other problems should be resolved by the academic units before forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

| A. Information from academic unit <i>initiating</i> the request:  |                        |  |  |  |
|---|------------------------|--|--|--|
| Initiating Academic Unit: Speech and Hearing Science  | Date: 4/2/12           |  |  |  |
| Registrar's Listing:  |                        |  |  |  |
| Course Number: 4430 Level: U X P G G  | Credit Hours: 3        |  |  |  |
| Course Title: Introduction to Language Science and Language Disorde   | rs                     |  |  |  |
| Type of Request:   New Course ☐ Group Studies ☐ Workshop Change   | □Study Tour □Course    |  |  |  |
| Academic Unit with related interests asked to review the request (use a unit while requesting concurrences from multiple units): Linguistics  | separate form for each |  |  |  |
| Date responses are needed: 4/16/12  |                        |  |  |  |
| B. Information from academic units <i>reviewing</i> the request   | :                      |  |  |  |
| The academic unit supports the proposal  The academic unit does not support the proposal.  Please explain:  Uniquishes supports the proposal. |                        |  |  |  |
| The academic unit suggests:   | ,                      |  |  |  |
| THE SELL TO   |                        |  |  |  |
| Signature of Department Chair Signature of Graduate Studies   | Chair (if applicable)  |  |  |  |