

**SPLH 880 Seminar in Speech-Language Pathology:
Clinical Treatment of Phonological Disorders
Spring 2010 Syllabus**

Class Meetings: Tuesday & Thursday; 1:10-2:50; 3049 Dole
March 23-May 6, 2010 (2nd 8 weeks)
Class Instructor: Holly L. Storkel; hstorkel@ku.edu; 864-0497; Dole 3021
Office Hours: By appointment

Course Description

This course is intended as an extension of undergraduate courses on phonology and SPLH 820 Clinical Methods in Developmental Phonological Disorders. It is assumed that students will be familiar with phonological terminology and concepts, phonetic transcription, developmental norms for phonology, and diagnostic methods from an undergraduate course on phonology and/or SPLH 820. The purpose of this 880 seminar is to introduce students to best practices in clinical treatment of developmental phonological disorders. To this end, guidelines for the selection of treatment targets and treatment methods to promote greatest change in phonology will be reviewed. Evidence from clinical research will be discussed to promote students' understanding of the efficacy of various sound selection and treatment methods. In addition, students will learn how to find relevant evidence and apply this evidence to clinical cases. For speech-language pathologists employed in the schools, children with phonological disorders constitute over 90% of the average caseload (NIDCD, 1994). Thus, the effective remediation of developmental phonological disorders represents a critical skill for any SLP student who intends to work in the public schools.

Course Objectives

This course is designed to meet the requirements of ASHA Knowledge Standards III-B Normal Processes, III-C Communication Disorders, and III-D Clinical Application in the area of Articulation/Phonology. At the end of this course it is anticipated that students will be able to demonstrate knowledge in the following areas:

1. Understand basic concepts, terminology, & theory: Demonstrate knowledge of place, voice, manner features of English phonology as applied to the diagnosis and treatment of speech disorders;
2. Develop an assessment plan: Accurately transcribe speech samples produced by children with multiple sound errors using the symbols of the International Phonetic Alphabet;
3. Analyze & integrate assessment findings/Determine presence of disorder: Accurately interpret and integrate findings from multiple phonological analyses (e.g., place-voice-manner, phonological processes, phonetic inventory, phonetic distribution, accuracy, stimulability, PCC) to arrive at a well-justified and accurate diagnosis of preschool children.
4. Develop a treatment plan based on available evidence: Select appropriate speech sound treatment goals based on client need and available evidence;
5. Develop a treatment plan based on available evidence: Plan phonological treatment including selection of goals, goal attack strategies, procedures, and activities based on available evidence.

It is assumed that students will already have a firm foundation in Objectives 1-3 by completing the relevant prerequisite coursework; therefore, these objectives will be assessed early and continuously throughout the course to ensure that students have the required foundation to benefit from class activities related to Objectives 4-5. Any student demonstrating weaknesses in Objectives 1-3 will need to meet with the instructor to create an individualized plan for mastering these objectives.

Course Materials

Required Readings:

Required readings will be available electronically through the KU Lawrence library <http://www.lib.ku.edu/> and/or Blackboard. In general, you will need Adobe Acrobat Reader to access these files. There is a link to the Adobe website on Blackboard where you can download Acrobat Reader for free. You can print the article or read it on your computer. If you have difficulty accessing an article, e-mail the instructor.

On-line Resources:

Blackboard course website at <http://courseware.ku.edu> for announcements, course materials, and reading quizzes.

We will also be using the Brownstone EDU on-line resource for mastery quizzes:

<http://edu.brownstone.net/edu/classes/kusplh880/> The first time you access our course site in EDU, you will have to “register” for the class. This involves creating a username and password. There are no costs associated with this registration.

Requirements

1. *In-Class Reading Quizzes (25% of grade)*

Students are responsible for the readings and should have extracted the relevant points from the **primary** reading prior to attending class. Class will focus on application of the techniques described in the reading to clinical cases and extensions to other populations. It is essential that each student understand the implication of the readings prior to attending class. To ensure this, students are required to read the **primary** reading prior to class and bring 1-page of notes to class. The instructor will check that each student has brought notes to class and then the primary reading will be quickly reviewed **by the students**. Students will be awarded points for correctly answering key questions about the primary reading. If you are absent from class, e-mail your 1-page of notes to the instructor (hstorkel@ku.edu) before the start of class.

2. *Mastery Quizzes on Brownstone EDU (25% of grade)*

Three quizzes will be administered during the course: (1) Basic Concepts – **March 30 (5 pm)**; (2) Transcription – **March 30 (5 pm)**; (3) Sound Selection & Elicitation – **April 26 (noon)**. These quizzes will be available on-line and will be administered in mastery mode. Mastery mode means that each student will answer a series of questions about each topic until they answer a specified number of questions correctly, indicating mastery of the topic. In the event that a student can not achieve mastery, she will need to meet individually with the instructor to construct an individual learning plan to achieve mastery of the requisite information. These quizzes will be open book and open notes.

3. *Midterm Case Report (25% of grade)*

Students will create a written assessment report and treatment plan for a clinical case. The treatment plan should be evidence based and refer to the research articles discussed in-class as well as any other relevant sources of evidence. The midterm case report will be due on **May 3 (8 am)**.

4. *Final Case Report (25% of grade)*

Students will create a written report for a second clinical case with application of the methods taught in class. Like the midterm case report, a brief diagnostic and more extensive treatment plan will be constructed with citation of the relevant evidence to support the plan. The final case report will be due on **May 13 (noon)**.

Portfolio

Any of the above listed assignments can be included in a student’s e-portfolio for the MA SLP program.

Academic Misconduct

Students are expected to observe all University guidelines pertaining to academic misconduct. As stated in the University Senate Rules and Regulations (2.6.1):

“Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another’s work; violation of regulations or ethical codes for treatment of human and animal subjects; or otherwise acting dishonestly in research.” Academic misconduct will not be tolerated and will be dealt with in accordance with all University rules and regulations.

Accommodations

The staff of Services for Students with Disabilities (SSD), 135 Strong, 785-864-2620 (v/tty), coordinates accommodations and services for KU courses. If you have a disability for which you may request accommodation in KU classes and have not contacted them, please do so as soon as possible. Please also notify the instructor in writing (e-mail is acceptable) within one week of receiving this syllabus so that appropriate accommodations for this course can be discussed.

If a scheduled requirement is in conflict with a mandated religious observance, you must notify the instructor in writing (e-mail is acceptable) within one week of receiving this syllabus so that an alternative arrangement can be made in advance of the scheduled requirement.

Grading

The final grade for this course will be assigned following a straight percentage scale:
93-100% A; 90-92% A-; 87-89% B+; 83-86% B; 80-82% B-; 77-79% C+; 73-76% C; 70-72% C-; 67-69% D+; 63-66% D; 60-62% D-; <60% F.

Attainment of the ASHA Knowledge Standards will be demonstrated by a grade of C- or higher on all assessment activities.

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NOTE: bold and * readings = primary (in-class reading quiz); unmarked readings = supplemental

Overview & Introduction

March 23 Overview (Gierut, '98b)
How to Read a Research Article
How to Find Evidence

Target Selection

March 25 Target Selection: Complexity (CC) **(Gierut, '99)***
In-Class Reading Quiz 1

March 30 NO CLASS (Instructor Out of Town) ***Basic Concepts Quiz* and *Transcription Quiz***

April 1 Target Selection: Complexity (CCC) **(Gierut & Champion, '01)***
(Gierut, '07)
(Thompson, '07)
In-Class Reading Quiz 2

April 6 Target Selection: Consistency of Error &
Other Ways to Evaluate Knowledge **(Gierut et al., '87)***
(Tyler et al., '93)
(Gierut, '98a)
(Wolfe et al., '03)
(Munson et al., '05)
In-Class Reading Quiz 3

April 8 Target Selection: Stimulability **(A. W. Miccio, Elbert, M., Forrest, K., '99)***
(A. W. Miccio & Elbert, '96)
(Glaspey & Stoel-Gammon, '05)
In-Class Reading Quiz 4

April 13 Target Selection: Developmental Norms **(Gierut et al., '96)***
(Rvachew & Nowak, '01)
(Morrisette & Gierut, '03)
(Rvachew & Nowak, '03)
In-Class Reading Quiz 5

April 15 Target Selection: Consistency of Substitute **(Forrest et al., '97)***
(Forrest et al., '00)
(Forrest & Elbert, '01)
(Tyler et al., '06)
In-Class Reading Quiz 6

April 20 Target Selection: Lexical factors **(Morrisette & Gierut, '02)***
(Gierut & Morrisette, '10)
In-Class Reading Quiz 7

Treatment Methods

April 22	Treatment Methods: Maximal Opposition	(Gierut, '92)* In-Class Reading Quiz 8
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April 26	<i>Sound Selection & Elicitation Quiz must be completed by noon</i>	
April 27	Treatment Methods: Multiple Opposition	(Williams, '05)* In-Class Reading Quiz 9
April 29	NO CLASS (Instructor Out-of-Town)	<i>Work on Midterm & Final Case Reports</i>
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<i>May 3 Midterm Case Report must be turned in by 8:00 AM</i>		
May 4	Treatment Methods: Cycles	(Tyler et al., '87)* (Hodson, '97) In-Class Reading Quiz 10
May 6	Treatment Methods: Metaphon	(Dean et al., '95)* (Major & Bernhardt, '98) (Hesketh et al., '00) (Bernhardt & Major, '05) In-Class Reading Quiz 11
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May 13	<i>Final Case Report must be turned in by noon</i>	

Readings

- Bernhardt, B., & Major, E. (2005). Speech, language and literacy skills 3 years later: A follow-up study of early phonological and metaphonological intervention. *International Journal of Language and Communication Disorders, 40*, 1-27.
- Dean, E. C., Howell, J., Waters, D., & Reid, J. (1995). Metaphon: A metalinguistic approach to the treatment of phonological disorder in children. *Clinical Linguistics & Phonetics, 9*, 1-19.
- Forrest, K., Dinnsen, D. A., & Elbert, M. (1997). The impact of substitution patterns on phonological learning by misarticulating children. *Clinical Linguistics & Phonetics, 11*, 63-76.
- Forrest, K., & Elbert, M. (2001). Treatment for phonologically disordered children with variable substitution patterns. *Clinical Linguistics & Phonetics, 15*, 41-45.
- Forrest, K., Elbert, M., & Dinnsen, D. A. (2000). The effect of substitution patterns on phonological treatment outcomes. *Clinical Linguistics & Phonetics, 14*, 519-531.
- Gierut, J. A. (1992). The conditions and course of clinically induced phonological change. *Journal of Speech and Hearing Research, 35*, 1049-1063.
- Gierut, J. A. (1998a). Production, conceptualization and change in distinctive featural categories. *Journal of Child Language, 25*, 321-341.
- Gierut, J. A. (1998b). Treatment efficacy: Functional phonological disorders in children. *Journal of Speech, Language, and Hearing Research, 41*, S85-S100.
- Gierut, J. A. (1999). Syllable onsets: Clusters and adjuncts in acquisition. *Journal of Speech, Language, and Hearing Research, 42*, 708-726.
- Gierut, J. A. (2007). Phonological complexity and language learnability. *American Journal of Speech-Language Pathology, 16*, 6-17.
- Gierut, J. A., & Champion, A. (2001). Syllable onsets II: Three-element clusters in phonological treatment. *Journal of Speech, Language, and Hearing Research, 44*, 886-904.

- Gierut, J. A., Elbert, M., & Dinnsen, D. A. (1987). A functional analysis of phonological knowledge and generalization learning in misarticulating children. *Journal of Speech and Hearing Research, 30*, 462-479.
- Gierut, J. A., & Morrisette, M. L. (2010). Phonological learning and lexicality of treated stimuli. *Clinical Linguistics & Phonetics, 24*, 122-140.
- Gierut, J. A., Morrisette, M. L., Hughes, M. T., & Rowland, S. (1996). Phonological treatment efficacy and developmental norms. *Language, Speech and Hearing Services in Schools, 27*, 215-230.
- Glaspey, A. M., & Stoel-Gammon, C. (2005). Dynamic assessment in phonological disorders: The scaffolding scale of stimulability. *Topics in Language Disorders, 25*, 220-230.
- Hesketh, A., Adams, A., Nightingale, C., & Hall, R. (2000). Phonological awareness therapy and articulatory training approaches for children with phonological disorders: A comparative outcome study. *International Journal of Language and Communication Disorders, 35*, 337-354.
- Hodson, B. W. (1997). Disordered phonologies: What have we learned about assessment and treatment? In B. W. Hodson & M. L. Edwards (Eds.), *Perspectives in Applied Phonology* (pp. 197-224). Gaithersburg, MD: Aspen.
- Major, E. M., & Bernhardt, B. H. (1998). Metaphonological skills of children with phonological disorders before and after phonological and metaphonological intervention. *Int. J. Lanugage and Communication Disorders, 33*, 413-444.
- Miccio, A. W., & Elbert, M. (1996). Enhancing stimulability: A treatment program. *Journal of Communication Disorders: Clinics Issue, 29*, 335-351.
- Miccio, A. W., Elbert, M., Forrest, K. (1999). The relationship between stimulability and phonological acquisition in children with normally developing and disordered phonologies. *American Journal of Speech-Language Pathology, 8*, 347-363.
- Morrisette, M. L., & Gierut, J. A. (2002). Lexical organization and phonological change in treatment. *Journal of Speech, Language, and Hearing Research, 45*, 143-159.
- Morrisette, M. L., & Gierut, J. A. (2003). Unified treatment recommendations on phonological knowledge and normative age-of-acquisition: A response to Rvachew & Nowak (2001). *Journal of Speech, Language and Hearing Research, 46*, 382-384.
- Munson, B., Edwards, J., & Beckman, M. (2005). Phonological knowledge in typical and atypical speech-sound development. *Topics in Language Disorders, 25*, 190-206.
- Rvachew, S., & Nowak, M. (2001). The Effect of Target-Selection Strategy on Phonological Learning. *Journal of Speech, Language, and Hearing Research, 44*, 610-623.
- Rvachew, S., & Nowak, M. (2003). Clinical outcomes as a function of strategy: A response to Morrisette and Gierut. *Journal of Speech, Language and Hearing Research, 46*, 386-389.
- Thompson, C. K. (2007). Complexity in language learning and treatment. *American Journal of Speech-Language Pathology, 16*, 3-5.
- Tyler, A. A., Edwards, M. L., & Saxman, J. H. (1987). Clinical application of two phonologically based treatment procedures. *Journal of Speech and Hearing Disorders, 52*, 393-409.
- Tyler, A. A., Figurski, G. R., & Langsdale, T. (1993). Relationships between acoustically determined knowledge of stop place and voicing contrasts and phonological treatment progress. *Journal of Speech and Hearing Research, 36*, 746-759.
- Tyler, A. A., Williams, M. J., & Lewis, K. E. (2006). Error consistency and the evaluation of treatment outcomes. *Clinical Linguistics & Phonetics, 20*, 411-422.
- Williams, A. L. (2005). Assessment, target selection, and intervention: dynamic interactions within a systemic perspective. *Topics in Language Disorders, 25*, 231-242.
- Wolfe, V., Presley, C., & Mesaris, J. (2003). The importance of sound identification training in phonological intervention. *American Journal of Speech-Language Pathology, 12*, 282-288.

Instructions for Midterm and Final Case Reports

Information about midterm and final clinical cases will be posted on Blackboard. Each student will be assigned a specific case for the midterm and final case report. This information will be posted on Blackboard. For each case, there is a transcribed speech sample. You will need to analyze the speech sample to provide a diagnosis for the case as well as a more detailed characterization of strengths and weaknesses.

Each person should create their own recommendations and treatment plan (see instructions below). Do **NOT** consult with the other student who is assigned your same case. Part of the purpose of this activity is to show that there are different approaches to the same clinical case. Collaboration with the person who is working on the same case is **FORBIDDEN**. You can discuss your case with other class members who are not assigned that case, but your final recommendation needs to reflect your own independent thinking.

Midterm

Each person will need to provide a paragraph (possibly 2) **clearly** stating and **justifying** his/her diagnosis, characterization, and recommendation for the assigned case. If you have information related to other aspects of language and development, you should comment on the developmental appropriateness of these measures in your diagnosis and make appropriate recommendations. **REGARDLESS OF WHETHER YOU RECOMMEND TREATMENT** for the child, each student will select sound(s) and word position(s) for treatment based on the evidence reviewed in-class. You will need to provide a justification for your selection, citing the relevant evidence from the assigned readings (both primary and secondary). This should require 1-3 paragraphs depending on how succinct you are in summarizing the information. Provide 10 treatment words and any justification for why you chose those words (list + 1 paragraph or perhaps even just a sentence). Describe the data you will collect to monitor change including treatment data, response generalization data, and stimulus generalization data. Be sure to indicate the frequency of data collection for each type of data. Provide a description of how you will evaluate your data (e.g., inspection of a summary table, inspection of a figure, statistical analysis).

Final

Follow the procedures described above for the midterm and include all components specified above. **In addition**, describe the components of your treatment approach and justify your plan by citing the relevant evidence from assigned readings (both primary and secondary).

Be sure to look at the grading rubric (on following pages) when preparing your response!

DIAGNOSTIC INTERPRETATION & RECOMMENDATION				
Diagnosis	<i>Inaccurate and/or Unclear</i>	<i>Partially accurate, poorly justified, narrow</i>	<i>Accurate, limited justification, narrow</i>	<i>Accurate, well justified, comprehensive</i>
	Diagnosis is unclear or inaccurate or absent and the justification does not sufficiently support the diagnosis.	Clear and accurate diagnosis including severity level but justification is weak (due to use of limited information) and inaccurate.	Clear and accurate diagnosis including severity level but justification is weak because only limited information is included to support the diagnosis or some information is incorrectly interpreted. Diagnosis also may ignore or incorrectly interpret information about other language skills (if available in the case).	Clear and accurate diagnosis with indication of severity that is justified by accurate interpretation of multiple pieces of information including score on a standardized test; developmental norms applied to misarticulated sounds or error patterns; impact of errors on communication. Diagnosis also includes information about other language skills (if available in the case).
Recommendation & Referral	<i>Inaccurate and/or Unclear</i>	<i>Partially appropriate, narrow</i>	<i>Appropriate, vague, narrow</i>	<i>Appropriate, detailed, comprehensive</i>
	Recommendation is confusing or inappropriate or absent with unconvincing justification.	Clear and appropriate recommendation but details are missing and justification relative to the diagnosis is weak or inaccurate. Referral for other services may be absent, even though referral is warranted.	Clear and appropriate recommendation but details are missing. Recommendation is justified relative to the diagnosis. Referral for other services may not be sufficiently detailed.	Clear, appropriate, and detailed recommendation that includes the number of sessions per week, the length of each session, and the context (e.g., individual or group, in-class or pull-out) or a detailed schedule for monitoring and/or follow-up (e.g., measures that will be administered, frequency of administration). Recommendation is justified relative to the diagnosis. Other services appropriately recommended, including referral to other professionals or additional testing needed from SLP.

TREATMENT PLANNING

Tx Goals/ Objectives	<i>Inaccurate & Inefficient</i>	<i>Partially accurate, slow</i>	<i>Accurate</i>	<i>Accurate & efficient</i>
Sound Selection	There are major problems in sound selection in that too many sounds are selected (i.e., lack of application of evidence to arrive at treatment targets) or inappropriate sounds are selected (i.e., sounds that are not produced in error). Alternatively, sound selection may be absent.	A limited number of errored sounds are selected for treatment but there are major shortcomings in the justification in terms of both breadth and accuracy of application of evidence.	A limited number of errored sounds are selected for treatment but there are shortcomings in the justification in terms of either breadth of evidence cited (i.e., certain factors ignored) or accuracy of application of evidence.	A limited number of errored sounds are selected for treatment and accurately justified using all available evidence reviewed in class (i.e., stimulability, consistency of substitute, consistency of error/knowledge, developmental norms, complexity) as well as other relevant factors (e.g., impact of error on communication, error is representative of a larger pattern, fit with tx context).
Word position selection	A word position is either not specified or no justification is provided.	A word position(s) for treatment is specified but there are major shortcomings in the justification in terms of both breadth and accuracy of application of evidence.	A word position(s) for treatment is specified but there are shortcomings in the justification in terms of either breadth of evidence cited (i.e., certain factors ignored) or accuracy of application of evidence.	A word position(s) for treatment is specified and justified with reference to all applicable evidence reviewed in class (i.e., consistency of substitute, complexity, developmental norms) as well as other relevant factors (e.g., impact of error pattern on communication, representative of a larger pattern, ease of teaching and/or finding treatment stimuli).

TREATMENT PLANNING

Materials/ Procedures	<i>Absent</i>	<i>Partial Selection</i>	<i>Complete Selection</i>	<i>Complete & Efficient</i>
Word selection	Some or all of the selected words do not contain the target sound in the target word position or the justification is absent.	Words containing the target sound in the target word position are selected for treatment but there are major shortcomings in the justification in terms of both breadth and accuracy of application of evidence.	Words containing the target sound in the target word position are selected for treatment but there are shortcomings in the justification in terms of either breadth of evidence cited (i.e., certain factors ignored) or accuracy of application of evidence.	Words containing the target sound in the target word position are selected for treatment and justified with reference to all applicable evidence reviewed in class (i.e., frequency, density) as well as other relevant factors (e.g., appropriateness for children, picturable, characteristics of other sounds in the word, diversity of other sounds in the word, diversity in part of speech)
Tx Approach	The treatment approach is underspecified with many elements of the approach missing or unclear and those that are present are poorly justified. OR, The entire treatment approach is not appropriately justified.	All elements of the treatment approach are clearly described but there are major shortcomings in the justification in terms of both breadth and accuracy of application of evidence. OR, Some elements of the treatment approach are missing or unclear but the elements that are presented are well justified in terms of accuracy and breadth of evidence.	All elements of the treatment approach are clearly described but there are shortcomings in the justification in terms of either breadth of evidence cited (i.e., certain factors ignored) or accuracy of application of evidence.	All elements of the treatment approach are clearly described including goal attack, criterion for advancement through program stages, treatment activities (e.g., modalities targeted), clinician antecedents, production criterion, and clinical feedback. Each element is justified with appropriate evidence reviewed in class (when applicable) or other practical considerations.

TREATMENT PLANNING

Data Collection Plan	<i>Inaccurate & Inefficient</i>	<i>Partially accurate</i>	<i>Accurate</i>	<i>Accurate & efficient</i>
	A monitoring plan is either not described OR the described plan has all of the following problems: inaccuracies in the description of treatment data, response generalization data, and stimulus generalization data OR data that should be included in the plan have been excluded OR the justification is weak or confusing.	A monitoring plan is described but two of the following three problems are present: inaccuracies in the description of treatment data, response generalization data, and stimulus generalization data OR data that should be included in the plan have been excluded OR the justification is weak or confusing.	A monitoring plan is described but there are inaccuracies in the description of treatment data, response generalization data, and stimulus generalization data OR data that should be included in the plan have been excluded OR the justification is weak or confusing.	A detailed monitoring plan is provided that clearly and accurately identifies the treatment data, response generalization, and stimulus generalization that will be collected (including specific sounds, linguistic context, environmental context, number of items, and frequency of administration). The monitoring plan is appropriately justified in terms of predictions about sound change resulting from the treatment plan.
Overall Grade				
A+	Highest on all elements	C+	Low on all elements	
A	Highest on 3/4 elements; High on 1/4 elements	C	Highest/High/Low on 3/4; Lowest on 1/4	
A-	Highest on 1/2 of elements; High on 1/2 of elements	C-	Highest/High/Low on 1/2; Lowest on 1/2	
B+	High on all elements	D	Lowest on all elements	
B	Highest/High on 3/4 elements; Low on 1/4 elements			
B-	Highest/High on 1/2 elements; Low on 1/2 elements			