Learning Objectives and Required Readings*

Part I: The Nature of Stuttering

Required Course Readings
- Yairi & Seery, Chapters 1-4.

Detailed Learning Objectives
- Provide a sampling of the range of definitions for stuttering.
- Describe why the manner in which stuttering is defined is important for scientists and clinicians.
- Differentiate between stuttering as a speech event/phenomenon and stuttering as a complex disorder.
- List, describe and demonstrate the range of disfluencies a speaker can produce.
- Discuss the complexity of fluent speech with specific reference to the various motor subsystems involved.
- Differentiate those disfluencies that are most characteristic of stuttering (stuttering like disfluencies or SLD) and those that are commonly observed across all speakers (other disfluencies or OD).
- Discuss some of the challenges associated with distinguishing stuttering from normal disfluency.
- Differentiate between the terms fluency, disfluency (and variants), dysfluency and stuttering.
- List the various dimensions of communication and behavior that may be affected in a person who stutters.
- Define what is meant by the ABCs of stuttering.
- Distinguish between incidence and prevalence of a disease/disorder and the different ways of expressing incidence.
- Identify the challenges in determining occurrence rates of stuttering.
- Provide data regarding how often stuttering occurs and those factors that appear to influence occurrence rate.
- Describe the reasons why it is important to establish accurate occurrence rates stuttering.
- Recognize and briefly describe the key historical and contemporary studies that guide our understanding of early stuttering.
- Distinguish between different viewpoints regarding the onset and development of stuttering in the young child.
- Describe our current understanding about the onset and development of stuttering in the young child.
- Outline how one might differentiate between a young child who stutters and one who is exhibiting normal disfluency.
- Describe factors that may be used to determining borderline stuttering in a young child.
- Describe some risk factors for stuttering in children.
- Define unassisted recovery and provide reasonable estimates for rate of unassisted recovery.
- Describe in detail those factors that are and are not predictive of unassisted recovery in the young child who stutters.
- Given a case history and description, provide a general prognosis for likelihood of unassisted recovery.
- Outline our state of knowledge about relationships between therapy provision and stuttering recovery.
- Describe and demonstrate the overt speech characteristics of persons who stutter.
- Describe how speech disfluencies can be quantified and qualified.
- Describe and demonstrate the range of physical concomitant behavior that can occur with stuttering.
- Describe how stuttering can influence other characteristics of speech production.
- Briefly describe the types of concomitant physiological activity associated with stuttering.
- Describe concomitant introspective features associated with stuttering including emotional features and cognitive features.
- Describe how social dynamics are impacted by stuttering.
- Outline in detail those factors that are known to affect the likelihood of stuttering moments in those individuals with advanced stuttering.
- Describe the likelihood of other disorders given a diagnosis of stuttering.
- Summarize how linguistic factors influence stuttering frequency.
Part II: Explanations of Stuttering

Required Course Readings

- Yairi & Seery, Chapters 5-7
- Kraft et al. (2012) Folia Phoniatica et Logop (required)
- Chang et al. (2011) Cerebrum (required)
- Walden et al. (2012) J Abnormal Child Psych (required)

Detailed Learning Objectives

- Briefly define scientific theory and distinguish how the term theory is used in science vs. common language.
- Distinguish between a theory and a model.
- Differentiate between predisposing, precipitating and perpetuating factors.
- Differentiate between risk factors and protective factors.
- Describe key criteria for evaluation of a theory/model of stuttering.
- Discuss the following issues as they apply to stuttering theory: theories of stuttering events vs. theories of etiology, single factor vs. multifactorial, stuttering as a monolith vs stuttering subtypes.
- Describe aspects of the disorder that a theory of stuttering should explain.
- Describe the various ways to organize the range of stuttering theories.
- Describe how explanations of stuttering can influence clinical management of stuttering.
- Provide specific examples of management approaches that derive from theoretical viewpoints.
- Compare and contrast the key theoretical perspectives on stuttering over the past century including:
  - Orton and Travis’s theory of cerebral dominance
  - Johnson’s diagnostogenic theory
  - Bloodstein’s anticipatory struggle theory
  - Brutten and Shoemaker’s Two Factor Theory
  - Sheehan’s Approach-Avoidance Conflict Theory
- Describe the demands and capacities framework and outline how it may help guide clinical management of people who stutter.
- Differentiate familial incidence studies from other genetic studies and summarize the main findings of such studies of stuttering.
- Differentiate twin studies from other genetic studies and summarize the main findings of such studies of stuttering.
- Differentiate family aggregation studies from other genetic studies and summarize the main findings of such studies of stuttering.
- Differentiate biological genetic studies from other genetic studies and summarize the main findings of such studies of stuttering.
- Define the following terms used in biological genetics: genetic marker, linkage studies, and association studies.
- Describe how current evidence for a genetic basis of stuttering may influence clinical management of stuttering currently, and in the future.
- Briefly describe neural substrates of normal speech and language function.
- Differentiate between imaging studies of brain structure and imaging studies of brain function.
- Summarize the results of recent structural brain imaging studies in stuttering and the current interpretations of those results.
- Briefly outline a theory of stuttering that implicates basal ganglia dysfunction (i.e. Alm)
- Describe why it may be of theoretical importance to study fluent (non-stuttered) speech of persons who stutter.
- Briefly describe a current psycholinguistic theory/model of stuttering (i.e. covert repair hypothesis).
- Briefly describe a current multifactorial theory/model of stuttering that implicates temperament and language skills (i.e. dual diathesis theory).
- Briefly describe a current multifactorial theory/model of stuttering that implicates a fundamentally unstable motor system (i.e. Smith’s multifactorial motor instability model).
Briefly describe a model of stuttering that implicates a faulty sensorimotor control system (i.e. DIVA model).

Part III: Clinical Management of Stuttering

Required Course Readings
- Yairi & Seery Chapters 8-14, 15 (sections on Cluttering and Acquired Stuttering)
- Lidcombe Program Manual (on course website)
- PCI Chapter (on course website)

Detailed Learning Objectives
- Connect various stuttering frameworks (ABC, CALMS, Yairi and Seery’s six dimensions) to assessment and management of stuttering.
- Describe the key goals of assessment of stuttering.
- Detail and provide a rationale for the key elements of a case history.
- Differentiate how age and experience with stuttering might alter the case history.
- Describe, perform and interpret the key behavioral measures that you would collect during a stuttering assessment.
- Describe Sheehan’s iceberg metaphor and describe how it might be used in assessment and therapy.
- Demonstrate familiarity with the range of self-report scales including:
  - Speech Situation Checklist
  - Stutterers Self-Rating of Reactions to Speech Situation (SSRSS)
  - Revised Erickson Scale (S-24)
  - Perceptions of Stuttering Inventory (PSI)
  - Communication Attitude Test (CAT)
  - Locus of Control of Behavior (LCB)
  - Purdue Information Questionnaire for Stutterers
  - Behavior Assessment Battery for School-Age Children Who Stutter (BAB)
  - OASES (pay special attention to this one)
- Differentiate between different approaches to measuring stuttering
  - Frequency of Disfluency per 100 syllables/words
  - Percent stuttered words
  - Fluency Frequency Index
  - Frequency of Stuttered Intervals
- Describe the common conventions for counting words/syllables and quantifying disfluencies.
- Calculate measure of frequency, proportion of stuttering type, speech rate and articulatory rates based on provided data.
- Use your understanding of normal speech production to interpret features and patterns of stuttering.
- Outline the key components of the Stuttering Severity Instrument (SSI).
- Describe how to measure stuttering adaptation and stuttering consistency.
- Design an assessment plan for a hypothetical client.
- Outline how one would vary your clinical assessment based on age.
- Demonstrate the ability to simulate a variety of voluntary stuttering behaviors.
- Outline how one would vary clinical assessment based on age.
- Outline and discuss the range of variables that need to be considered when designing a stuttering intervention and provide a rationale for their consideration.
- Use clinical information from an assessment to determine the ‘stated problem’, ‘contributing factors’ and ‘communication discrepancies’ for a hypothetical client.
- Describe Hugo Gregory’s basic principles for managing persons who stutter.
- Compare and contrast the philosophies and techniques of changing stuttering and changing fluency.
- Be able to demonstrate the range of fluency shaping and stuttering modification techniques.
- Outline key components of a prototypical stuttering modification program: Van Riper’s MIDVAS program.
- Outline key components of the following fluency shaping programs: Prolonged speech, Rhythmic speech, Fluency Plus and its variants.
• Outline how stuttering modification and fluency shaping may be integrated (e.g. Hanley’s two-tiered approach).
• Outline basic tenets of mindfulness based intervention and how it might be used as part of a program of stuttering treatment.
• Outline the basic tenets of cognitive behavioral therapy (CBT) and describe how it might be used as part of a program for stuttering treatment.
• Identify the special considerations when treating preschoolers who stutter.
• Compare and contrast the Lidcombe program, the Parent Child Interaction program and SP3 programs for treating preschoolers who stutter.
• Identify the special considerations when treating school aged children who stutter.
• Briefly describe Fluency Rules program, Smooth Speech and CBT program and Lidcombe program for treating school aged children who stutter.
• Describe ways one would deal with negative reactions to speech/stuttering in the school age child.
• Identify the special considerations when working with teenagers who stutter.
• Design a treatment plan for a hypothetical client.
• Articulate the relevant issues related to the use of altered feedback devices with stuttering clients.
• Generally describe the role of pharmaceuticals in the treatment of stuttering.
• Distinguish between developmental, neurogenic and psychogenic stuttering in with regard to differential diagnosis and intervention.
• Provide distinctions between cluttering and stuttering and explain how these distinctions would guide intervention.

MOST IMPORTANT, Simply producing facts is not sufficient. You need to be able to demonstrate critical thinking skills and your ability to synthesize information for the purposes of problem solving.

*Additional readings may be added over the course of the semester.