

SIGN LANGUAGE: LEARNING, STRUCTURE, AND CHANGE Self-Paced GeorgetownX Course through August 15, 2018

# **COURSE SYLLABUS**

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# Sign Language Learning, Structure, and Change

What myths and truths about sign languages have been revealed through research? Whether you are fluent in sign language or simply interested in learning more, join us on a journey through the history and evolution of American Sign Language!

**NOTE**: The course will be available through August 15, 2018. No certificates will be issued for work completed after August 15, 2018.

# LEAD FACULTY

#### **Ted Supalla**

Ted R. Supalla, Ph.D., is a Professor of Neurology, Linguistics, and Psychology at Georgetown University Medical Center, and he runs the Sign Language Research Lab, a part of the Center on Brain Plasticity and Recovery. He has published extensively on the structure of American Sign Language and other sign languages of the world. He has served as a consultant to the World Federation of the Deaf, where he participated in publishing a white paper on the status of sign languages around the world. He is also the author (with Patricia Clark) of *Sign Language Archaeology: Understanding Historical Roots of American Sign Language*. His lab hosts the Historical Sign Language Database (www.hsldb.georgetown.edu) as a resource tool for public use.

#### FACULTY SUPPORT TEAM

You can contact the course support team at gux@georgetown.edu.

# WHAT IS THE COURSE ABOUT?

This course aims to integrate the history of ideas about American Sign Language (ASL) with research that has been done on the structure, learning, and historical change of ASL and other sign languages.

<u>Structure</u> is crucial to languages. There are several layers of grammatical structure in all languages. We will learn about these and examine how sign languages are structured.

<u>Learning</u> is how children and adults acquire the ability to understand and use a sign language.

<u>Change</u> takes place over time in all languages. Recent research on historical change in ASL and other sign languages has begun to reveal how sign languages come into existence and

how they change as they are used over generations among deaf and hearing users. We will look at historical change in depth, especially the historical heritage of ASL.

This course is a four-week self-paced course. Lecture videos are delivered in ASL with English subtitles and voiceover. The course will introduce all of these students to the science of sign language research and, for fluent ASL signers, the history and structure of their own language. It will also expose students at the intermediate level to the fields of linguistics and the cognitive sciences.

# WHAT DOES THE COURSE INCLUDE?

Each module of the course listed in the Course Content Outline begins with an **Introduction to the Module** sub-section and ends with an opportunity to **comment on the module**. In between these sub-sections, you'll find both the **instructional sequence** for that module, including **lectures, exercises, and quizzes**.

# Course Section Outline

# Module 1: Emergence and Evolution of Sign Language

- 1. Fundamental issues for language status
- 2. Emergence and evolution of sign language
- 3. History of American Sign Language
- 4. Variation and change within ASL
- 5. Lexical representation and annotation
- 6. Cognitive processing
- 7. From transparent to opaque morphology
- 8. Literary innovation constrained by grammar
- 9. Framework for Sign Language Structure, Learning and Change

# Module 2: Factors Contributing to Natural Structure

- 1. Sign features and syntactic packaging
- 2. Co-articulation and timing of suprasegmentals
- 3. Interaction of syntax and prosody
- 4. The spatial architecture for linguistic scaffolding
- 5. Reference frame and spatial verb typology
- 6. Core lexemes and frozen derivatives
- 7. Layering of lexical representation and articulatory operations
- 8. Linear template and syntactic agreement slots
- 9. Optimizing loan words for syntactic agreement
- 10. Split between inflectional space and lexicon

# Module 3: Factors Contributing to Natural Learning

- 1. Biological and environmental factors for language acquisition and evolution
- 2. Challenge of designing a visual language based on English morphology
- 3. Potential impact of visual analogy on grammar
- 4. Morphological typology and complexity
- 5. The neurobiology of sign language processing
- 6. Reframing ASL as a classifier predicate language
- 7. Acquisition of ASL morphology
- 8. Best-fit architecture and cognitive scaffolding
- 9. Factors affecting homogenous use of sign language
- 10. Natural experiment for language evolution

# Module 4: Factors Contributing to Natural Change

- 1. Sign language archaeology
- 2. Emergence of grammar
- 3. Gestural discourse dynamics and collective memory
- 4. Historical sociolinguistics
- 5. History of polyglottism and diglossia in Deaf community
- 6. Reconstructing early ASL grammar
- 7. From syntax to bound morphology
- 8. Development of bound morphology
- 9. The current state of sign language structure, learning and change

# WHAT WILL I LEARN IN THE COURSE?

The course is designed to support you in achieving the following **learning goals**. By the end of the course, you should be able to:

- Identify the historical origins in natural gesture for the emergence of ASL grammar
- Describe the degree and types of structural variation within ASL, considering the possible influences from its contacts with other signed and spoken languages
- Discuss the role of visual analogy in learning ASL, considering the possible linguistic universals for signed languages
- List ways in which language specific variation and historical change for signed languages may compare and contrast to those for spoken languages
- Describe the visual, motoric, and cognitive constraints which may give rise to these phenomena

# WHAT SHOULD WE EXPECT FROM EACH OTHER?

What You Can Expect from Professor Supalla and the Course Team

The Course Team will participate in discussion boards to provide content clarification, guidance, and support. However, we encourage you to support your fellow students and learning community by commenting on each other's posts and answering each other's questions.

You can also email us with important content-related questions at gux@georgetown.edu.

#### What You Can Expect from edX

In the event of a technical problem, you should click the "Help" tab located on the left border of the screen (Figure 1). This "Help" tab opens an instruction box that directs you to student Frequently Asked Questions (FAQs) for general edX questions. You can also:

- Report a problem
- Make a suggestion
- Ask a question

You may post technical problems to the "Technical" thread of the discussion board. Finally, you may also contact <u>technical@edx.org</u> directly to report bugs.



Figure 1: Screenshot with Help tab

#### What We Expect from You

Students should spend around five to six (5-6) hours per module\_to watch lectures and work through the exercises and other activities, including the discussion threads and quizzes.

In each course module we have included activities to support you in reaching the specified learning objectives for that module. These are the activities that are counted toward achieving the certificate for the course. The graded activities, which include both exercises and quizzes, are categorized as **homework** and count for 100% of your final grade. They include:

- Multiple choice questions; and
- Dropdown questions

To receive a course certificate, you must sign up for a Verified Certificate, complete/submit all graded assignments by August 15, 2018 (23:59 UTC), and receive a score of 75 percent or higher.

All activities included in the course are designed to help you gauge your learning as a result of your interaction with the course content. Instructions on how to complete the activities are included within each course section.

#### Timeline

As part of this self-paced course, you are invited to complete the course on your own timeline and at your own pace. **Our only due date is August 15, 2018**, which marks the last day this course is available as a live course.

#### Netiquette Guidelines

#### **Please be respectful**

To promote the best educational experience possible, we ask each student to respect the opinions and thoughts of other students and be courteous in the way that you choose to express yourself. Informed debate should never give way to insult, rudeness, or anything that might detract from the learning process. SLSX-401-01x students should be respectful and considerate of all opinions.

In order for us to have meaningful discussions, we must learn to understand what others are saying and be open-minded about others' opinions. If you want to persuade someone to see things differently, it is much more effective to do so in a **polite**, **non-threatening way** rather than to do so antagonistically. Everyone has insights to offer based on his/her experiences, and we can all learn from each other. Civility is essential: Our course staff can, and will, remove students from the class who detract from the learning process with insulting comments on the course-wide discussion boards.

#### Look before you write

Prior to posting a question or comment on the discussion board, the Georgetown course team asks that you look to see if any of your classmates have the same question. Upvote questions that are similar to your own or that are also of interest to you, instead of starting a new thread. This will greatly help our course team best monitor the discussions and bring important questions to Professor Supalla's attention.

#### Use the discussion board for course-related posts only

Although we encourage students to get to know each other, please use the discussion board for course content conversations only.

# Properly and promptly notify us of technical issues

Although we do not predict technical issues, they can and may happen. To make sure these receive prompt attention, post details about any technical issues directly on the "Technical"

discussion thread or email <u>technical@edx.org</u> directly. You may reach us with courserelated content questions at <u>gux@georgetown.edu</u>.

#### Academic Integrity

#### **Observe edX and GeorgetownX's honor policies**

Although collaboration and conversation will certainly contribute to your learning in the course, we ask students to refrain from collaborating with or consulting one another on any graded material for the course. Violations of the honor policy undermine the purpose of education and the academic integrity of the course. We expect that all work submitted will be a reflection of one's own original work and thoughts.

GeorgetownX faculty and staff expect all members of the community to strive for excellence in scholarship and character.

#### APPENDIX A: DETAILED COURSE OUTLINE

#### 1. Module 1: Emergence and Evolution of Sign Language

In this section we discuss the legacy of ASL and the challenges encountered when considering its status as a human language.

**Key Questions** 

- What kind of similarities and differences exist between signed and spoken languages?
- What factors lead to misconceptions about ASL?

Learning Objectives

- Describe how the definition of human language (an open-ended system with symbolic units) applies to a signed language like ASL
- Identify a common culprit for a variety of misconceptions about ASL

#### 2. Module 2: Factors Contributing to Natural Structure

Throughout this module we will discuss the syntax and its interface with the lexicon of ASL.

Key Questions

- What syntactic constraints are there in ASL?
- How is the lexicon varied?
- What kind of prosody is required for combining signs into sentences?
- How do the syntax and prosody interact?

Learning Objectives

- State the role of facial expression in the syntax of ASL
- Define "spatialized syntax"
- Name at least 2 categories of spatial verbs in ASL
- State the relationship between spatial inflection and linear sign order for sentences
- Name one kind of variation as documented in the 1965 Dictionary of American Sign Language
- Define "frozen sign" and its role in ASL lexicon
- State the linguistic term for the development of a standard frozen sign
- Give an example of a loan sign
- Name at least two characteristics for how such loan signs can accept inflections

# 3. Module 3: Factors Contributing to Natural Learning

In this module, we will revisit the efforts to develop a manual system that emulates spoken English, look at the ongoing debate over the role of visual analogy and depiction in shaping the grammar of ASL as well as the growing mind of a child signer.

To resolve the classic question about how a visual language best suits the human mind, we offer a rationale for understanding morphological typology within ASL as a gradient. We then demonstrate how this gradience allows us to study the correlation between brain activation in the adult signer and the morphological continuum.

In short, this module introduces the idea of treating ASL as a classifier predicate language with an inherent ability to support a wide typological range of morphological processes.

Key Questions

- What is the morphological continuum?
- What is a classifier predicate language?
- How does a child learn a visual language like ASL?
- Do signers and non-signers process natural gesture in the same way?

Learning Objectives

- Distinguish between continuous variation and discrete componentiality in sign innovation
- Identify the characteristic features of grammar that occur in both homesign and mature community sign languages
- Define the term "linguistic typology"
- Describe the potential reasons for typological differences within ASL morphology according to observational and neurolinguistic research on the morphological continuum.
- Define the term "polysynthetic morphology"

- Define the term "classifier predicate construction"
- Define the term "movement root"
- Define the term "base grid"
- Define the term "morphological continuum"

# 4. Module 4: Factors Contributing to Natural Change

In this last module, we will consider how language universals would determine the way gesture changes into sign language. To visualize how ASL has emerged and evolved through its history, we will review seminal fieldwork on young sign languages and then revisit early days of ASL. With further data from the HSLDB, we are able to reconstruct how it evolved into modern ASL.

Key Questions

- What does syntax and morphology in early ASL look like?
- What did the scholars of 19th century ASL know about ASL grammar?
- How can we visualize what ASL looked like at its inception?
- What can we learn from looking at natural gesture to help us with this visualization?
- How much influence does the consistent contact with the English language impose onto the grammar of ASL?

Learning Objectives

- List at least one characteristic of innovative gestural discourse
- Describe the relation between signs whose origin is opaque, the process of reanalysis, and folk etymologies
- Describe how it may be possible to find evidence of early sequencing for mature sign languages
- Determine whether there was evidence of simultaneous morphology in ASL in the 19th century
- Define the term "grammaticalization" as it applies to historical change in ASL