



College of Education

## **COURSE SYLLABUS**

### **EEX 6136: DYSLEXIA, LANGUAGE, AND THE BRAIN**

#### **Instructor**

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#### **Course Description**

This course addresses dyslexia's neurobiological origins, its effect on language and literacy development, and the variations in the processing and development of the various elements of language and literacy among students with and without dyslexia. The course also addresses linguistic structures of and historical influences on the English language.

It is my intent that students from all diverse backgrounds and perspectives be well-served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that the students bring to this class be viewed as a resource, strength and benefit. Further, it is my intent to present materials and activities that are respectful of diversity: gender identity, sexuality, disability, age, socioeconomic status, ethnicity, race, nationality, religion, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally, or for other students or student groups.

#### **Objectives**

Participants will...

- Explain theories of language acquisition and learning and the progression of language development as they pertain to students with dyslexia.
- Identify the sources of differences in students' development, including environmental influences, biological factors, and L1 vs L2 acquisition.
- Explain the influences of linguistic knowledge on reading and spelling.
- Describe the most common intrinsic differences between good and poor readers (i.e., cognitive, neurobiological, and linguistic).
- Define terminology related to dyslexia, language, and the brain.
- Explain the functions of various parts of the brain in reading, and how those functions are impaired in students with dyslexia.

- Explain the key differences in brain activity during reading of students with and without dyslexia.
- Identify, pronounce, classify, and compare the consonant and vowel phonemes of English.
- Explain the broad outline of historical influences on English morphemes and spelling patterns, especially Anglo-Saxon, Latin (Romance), and Greek.
- Analyze common linguistic rules, relationships, and patterns in English.

### **Course Meetings**

It is expected that students will devote approximately 12-15 hours per week to preparing for and participating in assigned course content. Modules begin on the date listed on the schedule and end at 11:59pm at the conclusion of the module. It is the student's responsibility to complete all requirements for each module in the time specified. Two synchronous meetings will be scheduled during this course. The synchronous meetings will be done via Zoom and will be scheduled by your instructor at the beginning of the course. There is a noon and a 7 pm option for each of the two zoom sessions. ***Please see the last page of this syllabus for zoom dates and times.***

### **Course Requirements**

Evaluation of student work will be assessed from performance on the following:

#### **Class Discussions**

Each module will include whole-class or small-group discussions. Some discussions are asynchronous, which means you can post your thoughts in the discussion forum at any time during the module. Other discussions are synchronous and will be conducted using Zoom videoconferencing. For each discussion, students are expected to participate fully. Discussions are an opportunity to demonstrate your understanding of course material, so the quality of discussion contributions is more important than quantity. To receive full credit for class discussions, they must be completed on time include substantial and thoughtful information, and address all the questions asked. Discussions count for 25% of your grade.

#### **Knowledge Audits**

Each module will include a short, timed knowledge audit (KA), which are designed to assess students' progress toward mastery of course objectives and professional knowledge standards. KAs will open at the beginning of the module, Monday morning, and close on Sunday night at 11:59pm. Since the KA will be open for the entire module, missing a KA will result in a grade of 0. Please plan schedules accordingly. Although the KAs are "open book," the timed nature of the activity will require a high level of familiarity with the content. Therefore, students should complete all the readings and module activities before beginning the KA. KAs are to be taken independently and count 25% of the final course grade.

#### **Demonstrations of Learning**

1. *Flight plan*. A “flight plan” is a way for you to organize your knowledge and plan your learning. For this course, you will analyze your expectations and goals stated in your flight plan made at the beginning of the previous course. Which of your goals and expectations have been met? How did this realization come about? Did you create any new goals or expectations? Additional guiding questions are available. You will also summarize your analysis of the 3 to 5 most important goals in your brief written document from the previous course. (5%)

2. *Dyslexia and Brain handout*. You will submit a one page (front and back) handout (flyer, brochure, trifold) that synthesis relevant information about the brain and its role in language and literacy development. The handout should be directed to one of the following audiences; School/ district administrators, Teachers, Parents/ caregiver, Students (10%)

3. *Advanced Blendable Sounds Video*. You will submit an advanced blendable sounds video of yourself pronouncing and classifying each phoneme in the English language using the methods recommended in class. You are to present the phonemes in a logical structure (10%) Together these assignments will count as 25% toward your final grade.

### **Idea Professional Development Activity Plan.**

You will compile a professional development package in two parts. For part A, you create three, one-page (front and back) handouts (flyer, brochure, trifold) that synthesize relevant information about the topics selected. Each handout should include *the importance of the topic for your audience and should have clear connections to implications for working with developing and struggling readers*. For part B, you will write up a professional development presentation for you to “implement” to accompany only one of the handouts. For this presentation select the one of the topics (of the already chosen 3) that you wish to explore further. This project will count as 25% toward your final grade.

### **Course Grade**

The final (letter) grade in the course will be based on four criteria: (1) in-class discussions, (2) knowledge audits, (3) demonstrations of learning, and (4) the final project. To arrive at a final grade, each requirement will be individually evaluated and then combined into a weighted composite (total). The weights for these assignments are as follows:

Class Discussions 25%

Knowledge Audits 25%

Demonstrations of Learning 25%

Professional Development Activity Plan 25%

Total 100%

93.0% - 100% A 73.0% - 76.9% C

90.0% - 92.9% A- 70.0% - 72.9% C-

87.0% - 89.9% B+ 67.0% - 69.9% D+

83.0% - 86.9% B 63.0% - 66.9% D

80.0% - 82.9% B- 60.0% - 62.9% D-

77.0% - 79.9% C+ 59.9% or below E

For greater detail on letter grades and university policies related to them, see the Registrar’s

Grade Policy regulations at <http://www.registrar.ufl.edu/staff/grades.html>

For information on current UF grading policies for assigning grade points, see the following:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

## Readings

### \* Required Texts

Dehaene, S. (2009). *Reading in the brain: The new science of how we read*. New York: Penguin.

Eden, G. F., & Moats, L. (2002). The role of neuroscience in the remediation of students with dyslexia. *Nature Neuroscience*, 5, 1080-1084.

Henry, M. K. (2010). *Unlocking literacy: Effective decoding and spelling instruction* (2<sup>nd</sup> ed.). Baltimore, MD: Brookes.

Hruby, G. G., & Goswami, U. (2011). Neuroscience and reading: A review for reading education researchers. *Reading Research Quarterly*, 46(2), 156-172. doi: /10.1598/RRQ.46.

\*Moats, L. C. (2010). *Speech to Print: Language Essentials for Teachers* (2<sup>nd</sup> ed.). Baltimore, MD: Brookes.

Moats, L. C., & Rosow, B. L. (2011). *Speech to Print workbook: Language Exercises for Teachers* (2<sup>nd</sup> ed.). Baltimore, MD: Brookes. **This text is not required but you are strongly encouraged to complete the suggested assignments from it.**

Owens, R. E. (2015). *Language development: An introduction* (9<sup>th</sup> ed.). Pearson Education.

Sylvan, L. J., & Christodoulou, J. A. (2010). Understanding the role of neuroscience in brain based products: A guide for educators and consumers. *Mind, Brain, and Education*, 4(1), 1-7.

Ward, J. (2010). *The student's guide to cognitive neuroscience*. (2<sup>nd</sup> ed.). New York, NY: Psychology Press.

Willingham, D. T. (2015). For the love of reading: Engaging students in a lifelong pursuit. *American Educator*, 39(1), 4-13.

\*Wolf, M. (2008). *Proust and the squid: The story and science of the reading brain*. Cambridge: Icon.

MODULE ASSIGNMENTS	DATE	DAY OF WEEK
<b>MODULE 1</b>	<b>FEB 16-MARCH 2</b>	<b>WEDNESDAY</b>
ZOOM	FEB 22 - 12 pm and 7 pm	TUESDAY
1ST POST	FEB 24	THURSDAY
FLIGHTPLAN	FEB 28	MONDAY
2 <sup>ND</sup> POST	MARCH 2	WEDNESDAY
K AUDIT	MARCH 2	WEDNESDAY
<b>MODULE 2</b>	<b>MARCH 3-MARCH 20</b>	<b>THURSDAY</b>

1 <sup>ST</sup> POST	MARCH 10	THURSDAY
LANGUAGE AND BRAIN HO	MARCH 17	THURSDAY
2 <sup>ND</sup> POST	MARCH 20	SUNDAY
K AUDIT	MARCH 20	SUNDAY
<b>MODULE 3</b>	<b>MARCH 21-APRIL 4</b>	<b>MONDAY</b>
1 <sup>ST</sup> POST	MARCH 27	SUNDAY
BLENDABLE VIDEO	APRIL 1	FRIDAY
2 <sup>ND</sup> POST	APRIL 4	MONDAY
K AUDIT	APRIL 4	MONDAY
<b>MODULE 4</b>	<b>APRIL 5-APRIL 20</b>	<b>TUESDAY</b>
ZOOM	APRIL 7 12 pm and 7 pm	THURSDAY
1 <sup>ST</sup> POST	APRIL 11	MONDAY
PD	APRIL 19	TUESDAY
2 <sup>ND</sup> POST	APRIL 20	WEDNESDAY
KA	APRIL 20	WEDNESDAY

ZOOM MEETINGS. To access zoom links please go to home page, scroll down to zoom conferences on left side bar and you will see zoom links. Attendance is required at one meeting on Feb. 22 ( noon and 7 pm) and one meeting on April 7 (noon and 7 pm)

