

The Science of Reading: From Research to Practice Course Syllabus

Course Description

This course offers an in-depth exploration of the science of reading—an evidence-based body of research that reveals how proficient reading and writing develop, why some students experience difficulty, and how effective assessment and instruction can significantly improve literacy outcomes. Grounded in the principles of prevention and intervention, the course emphasizes practical applications of this research in classroom settings. Drawing from real-world experiences in an elementary, middle, and high school classroom, the course demonstrates how to deliver direct, explicit instruction using The Science of Reading. These include building background knowledge, expanding vocabulary, understanding language structures, developing verbal reasoning, and fostering literacy knowledge. Rather than viewing these components as isolated skills, the course highlights how they work together in an integrated approach to support students in becoming confident, strategic readers capable of tackling complex texts.

This course enhances classroom teaching effectiveness and supports improved student outcomes by introducing new knowledge in The Science of Reading and its evidence-based application in literacy instruction.

Course Objectives

At the end of this course you should be able to:

- 1. Identify the research behind The Science of Reading.
- 2. Examine the process of implementing The Science of Reading in Maryland.
- 3. Identify the stages of reading development.
- 4. Describe interventions used to support struggling readers that align with The Science of Reading.
- 5. Identify assessments used to monitor a student's reading ability.
- 6. Examine how The Science of Reading provides equity and access to all learners.
- 7. Identify a parent's role in The Science of Reading.
- 8. Describe how The Science of Reading looks different in elementary, middle, and high school.

Modules

- Module 1: Unpacking the Science: What Research Really Says About Reading, Quiz 1
- Module 2: Cracking the Code: How Maryland Is Putting the Science of Reading to Work,
 Quiz 2
- Module 3: Foundations of Reading: How the Brain Learns to Read, Quiz 3



- Module 4: From Struggle to Strength: Interventions Backed by the Science of Reading, Quiz 4
- Module 5: Read the Signs: Assessments That Drive Literacy Success, Quiz 5
- Module 6: Literacy for All: How the Science of Reading Closes the Gap, Quiz 6
- Module 7: Partners in Literacy: A Parent's Role in the Science of Reading, Quiz 7
- Module 8: Same Science, Different Stage: Reading Instruction Through the Years, Quiz 8

Grading

Each quiz must be passed at an 80% or higher (three attempts allowed).

Format

This is a self-paced, asynchronous (no required live meetings) course. Throughout the PD course, you will find it helpful to take notes along the way to assist with the quizzes. Within each module, you will find reflection assessments that are not graded but will help in your journey through the course. There is an interactive forum in the course to help you connect with peers and instructors, share ideas, and collaborate on best practices throughout your learning journey.