Planning Rubric for Analyzing and Constructing
Undergraduate Syllabi to Teach the Science of Reading:
Supporting Ohio's Plan to Raise Literacy Achievement

The following tool is designed to articulate the topics that should be included in coursework covering Ohio's 12-hour Reading Core in teacher preparation programs. Sufficient coverage of these topics with relevant readings, lectures, application, and field experience is believed to provide the foundation for pre-service teachers to understand the science of reading and to implement instructional practices that are consistent with reading science.

This rubric was designed to be used collaboratively by university faculty as a self assessment of current coursework. Collaboration among faculty should lead to discussion, goal setting and planning. The intent is reflection and planning, not evaluation.

The topic headings identify the elements of reading science. Topics marked with (*) are considered essential components. Topics listed in bold font are represented in *Ohio's Plan to Raise Literacy Achievement*

Coverage of the topics in readings and lectures should be seen across courses. Faculty should insert the names of their core courses. Topics that are introduced early should be revisited to support deepening knowledge. Application of learning should be evident in course assignments and evaluations, as well as in field experiences. Where and how each topic is addressed should be marked using the following labels:

> R = course readings
> L = lecture
> E = assignment and/or evaluation
> F = field experience

Part 1: Review Content of the 12 Hour Core

Topic	Courses in 12 hour Core			
	Course 1: _____	Course 2: _____	Course 3: _____	Course 4: _____
How Students Learn to Read				
Content and practices that illustrate the believe that all students can learn				
Definition of reading science				
Importance of research in education				
Definition of research, types of research, research design and methods, publication process				
Current data on student reading outcomes: The Reading Crisis				
Gap between research and practice				
Contribution of cognitive psychology to understanding reading				
How instruction changes how we process information				
How young children learn to read • how the **brain learns to read and the 4 part processor** • **essential components** • **simple view of reading** • rope model • Ehri's Stages of Development • The relationship between written and spoken language • Mode and function of spoken language • Pre-alphabetic, Early alphabetic, Later alphabetic				
The role of oral language in reading (print awareness, letter knowledge)				
Introduction to word structure (English orthography)				
Building literacy in young children - how to back map that for older struggling readers				

Building fluency/automaticity in all foundational skills				
Communicating the science of reading to parents and other stakeholders				
Essential Elements of Reading: What to Teach				
Print awareness				
Phonological awareness Connection to the Simple View of Reading, Four Part Processor Phonetics Phonology = Phonological awareness and Phonemic Awareness: define and differentiate • gradual acquisition of PA • continuum of PA skills • elusive nature of phonemes Articulation (place and manner of articulation)				
Phonics and word recognition Critical Elements of Effective Instruction for Word Rec Skills: - Systematic and Cumulative - Explicit Instruction - Focus on critical skills - Logical Sequence - Small steps, organized and focused - Pacing - Corrective feedback - Distributed and cumulative practice - Diagnostic Teaching Typical Practices				
Decoding and the relationship to language comprehension				
Oral Reading Fluency • the relationship to reading comprehension • the importance of word reading fluency to develop fluency with connected text				
Morphology				

smallest meaningful parts of words meanings of prefixes inflectional and derivational suffixes combining rules categories of morphemes: free (can be used as a base word) and bound (affixes) compound words				

Vocabulary Development
- The vocabulary gap
- Links between vocabulary and comprehension
- Research based practices for vocabulary development
   - Selecting key words to teach
   - Providing "kid friendly" definitions
   - Key word strategies
   - Monitoring understanding (click/clunk)
Semantic Mapping				

Oral Language Development the contribution of oral language to reading comprehension Language Systems (orthography, phonetics, phonology, morphology, syntax, semantics) Language development stages The connection between language and reading Developmental stages of reading and spelling **Syntax and Semantics** - Syntax - Rule systems that govern how words are combined into phrases, clauses, and sentences: - Understanding of how clauses and sentences work - Parts of speech - Types of phrases - Providing practice with sentence manipulation to build language facility - Semantics - Meanings of words, phrases - Synonyms				

- Semantic classe - Antonyms Multiple Meanings (use of the context processor)				
Reading Comprehension Skills - Multi-component skill set—teachable skills that help comprehension - Role of Fluency - Large Importance of background knowledge - Mental models (situation model) - Local and global coherence - Cohesive devices - Inference - Role of Vocabulary - Role of Memory **Comprehension Development** - Review of contributions of word reading ability/language use - Relationship between reading and listening comprehension - Word Comprehension - Sentence Comprehension (syntactic awareness) - Integration and inference (to establish coherence) - Comprehension monitoring (to evaluate comprehension and to generate action if comprehension fails) - Knowledge and use of text structure - Narrative Expository				
Writing				
Spelling (encoding) system of our language necessary along with phonological skills for rapid word recognition (Four Part Processor) correspondences between speech and print (and the probability that certain letter sequences could be a word – recognizing orthographic constraints) lack of orthographic knowledge results in slow/inadequate reading				

significant factor in developing automaticity				
Academic language and academic vocabulary				
Inferential and narrative language skills				
Content area reading strategies, discipline specific literacy strategies				
Communicating the essential elements of instruction to parents and other stakeholders				
Essential Elements of Effective Instruction: How to Teach				
Overview of components of effective reading instruction				
Explicit and Systematic Instruction				
Findings from seminal research studies and meta-analyses				
What research says about teaching phonological and phonemic awareness: build awareness of the internal details of spoken language blending and segmenting syllables alliteration categorization onset/rime blending/segmenting phonemes manipulation of phonemes hearing individual sounds in words making sounds: mouth placement, etc. Setting up a Sound Wall (advantage over Word Wall)				
What research says about how to teach word recognition skills What research says about teaching phonics and decoding words are composed of sounds that are represented by symbols speech sounds are represented by writing (letters of the alphabet) code emphasis vs. meaning emphasis impact of Whole Language and the 3-cuing system learning to read – not like learning to talk research base behind the code emphasis approach (*Becoming a Nation of Readers*, NRP) introduction of phoneme/grapheme relationships				

Decoding/Encoding Activities **m**ajor phonics content (consonant, vowels, blends, etc.) sequencing of content choosing content to be taught and instructional time on each (i.e. teaching to mastery, not one week per concept) linking to decodable texts teaching letter-sound correspondences sequence for teaching letter-sound correspondence blending Successive Blending for students with short term memory issues Word building routines for teaching sounds blending consonants with vowels examining minimal pairs word patterns frequency of patterns order of introduction activities to teach patterns Teaching Irregular words				

What research says about how to teach word knowledge
- Independent word learning
  - Word analysis (i.e. prefixes, suffixes)
  - Context clues
  - Morphemic analysis
  - Cognate awareness
  - Word origins
 -Word Consciousness
  - Language play (i.e. alliteration, categories),
Word associations (synonyms, antonyms, homographs and homophones)				

What research says about how to teach multisyllabic words **s**tumbling block for older readers with reading difficulties – need for multisyllabic word strategies				

importance of building a flexible core of strategies to unlock a variety of multisyllabic words teaching the most common affixes identification of the syllables and syllable types pattern based decoding and encoding (silent e, consonant doubling, etc.) Application and practice using decodable text				
Orthographic Mapping - Ehri's theory (orthographic mapping, which bonds the sounds in spoken words to their spellings) - visual memory is not how we read - Written words are anchored mainly to their sounds, not their meanings - Storing written words in long-term memory requires sound proficiency - Works from pronunciation to spelling - Awareness/knowledge versus proficiency Reading practice doesn't help kids who can't orthographically map				
What research says about teaching oral reading fluency - Connection to comprehension (reciprocal relationship between fluency and comprehension) - Difference between fluency and automaticity - Repeated and monitored oral reading				
What research says about how to teach morphology				
What research says about how to build background knowledge				
What research says about how to teach academic language and vocabulary				
What research says about how to teach writing -Classroom practices: - Response to texts - Summaries - Notes about a text - Answer questions				

- Create and answer -To teach: - The process of writing - Text structures for Writing - Paragraph or sentence construction skills - Spelling Skills (Improves Word Reading Skills) -Sentence Writing - Building blocks - Content of curriculum drives the rigor of the writing instruction Grammar taught within the context of writing				
How to select texts for various purposes **Importance of Quality Text** Thematic Units Close Reading: - Explicit instruction regarding analysis of text craft and structure. - Choose texts that will increase knowledge about content and the world through texts -Thorough and methodical examination of meaning -Reflection on the meanings of individual words and sentences. Engage students in rich discussion using textual evidence to ground conversations				
What research says about how to accelerate learning for older struggling readers				
What research says about how to teach inferential and narrative skills				
What research says about how to build oral language skills, language comprehension				
What research says about how to teach writing				

What research says about comprehension instruction and intervention
- Activities for before, during and after reading
    - Questioning
    - Main Idea				

- Summarizing
- Instruction:
   - Strategies should be documented as effective
   - The importance of application of principles of explicit instruction
   - The importance of modeling, guided instruction and feedback
   - Effective strategy instruction and background knowledge				

What research says about how to teach content area reading and writing
- Building Students Knowledge:
-   Meaningfully connect new information to prior knowledge
-   Knowledge rich curriculum provides incidental learning opportunities
-   Knowledge grows exponentially – start early.
Shift in role of content area teachers:
   - More intentional use of texts
   - Devotion of time to reading complex texts
   - Increasing time for student discussions
Teaching of academic vocabulary
Areas of Difficulty for Students With Writing Problems
Knowledge difficulties
   - Skill difficulties
   - Motivation problems
Knowledge Acquisition:
   - cognitive skills (i.e. reading with understanding/
   - solving problems) are closely intertwined with knowledge of content
Learning content should start early				

Communicating research-based reading instruction to parents and other stakeholders				

Designing Schools That Meet the Needs of ALL Students--Collaborative Problem Solving and MTSS				

Introduction to collaborative problem solving and MTSS
   • systems
   • students				

Definition of MTSS, RtI				
(Multi-component) - Supporting English Language Learners - Supporting students with significant comprehension difficulties - Dyslexia - Reading difficulty not attributable to low intelligence or poor teaching) Difficulties with tasks that involve phonological processing and phonological representations.				
Introduction to 3 tier model, connection between reading and behavior				
Components of tier 1				
How to use data to evaluate the effectiveness of tier 1				
How to differentiate tier 1 instruction				
How to use screening to plan tier 1 instruction				
Components of tier 2				
How to use data to plan tier 2 support				
How to use data to group for tier 2				
How to use screening to plan tier 2 instruction				
Components of tier 3				
Introduction to assessment and differentiation				
How research models influence assessment - cognitive model				
How to select assessments based on question about the student				
The 4 purposes of assessment • **Familiarity with assessments of each purpose -**				
Characteristics of screening assessments				
Difference between norm referenced and standardized tests				
How to evaluate the reliability and validity of a test				

How to give a CBM (e.g. Acadience Reading)				
How to conduct survey level assessment				
How to conduct intervention-based diagnostic assessments				
How to develop assessment questions based on the cognitive model				
How to select intervention-based diagnostics to answer assessment questions				
How to assess oral reading fluency listening comprehension vocabulary and background knowledge				
PA and Phonics and Spelling Assessments Purpose of assessments diagnostic Phonological Awareness assessments to evaluate segmenting, blending and identification of first, last and middle sound Diagnostic Phonics tests to provide information about student's accuracy with specific phonics concepts and patterns spelling assessments fluency (with sounds, individual words and connected text) Beck's Specific Phonics Assessment				

How to assess reading comprehension
- Challenge of comprehension assessment
- Formative to inform future teaching practices
- Summative to assess achievement
- Diagnostic assessments
- Ranges of responses:
  - True/False
  - Multiple choice
  - Cloze
  - Open ended questions
Measures of listening comprehension				

How to use progress monitoring data to evaluate support				
How to create and read a progress monitoring graph				

How to evaluate fidelity of instruction				
How to implement with fidelity				
How to intensify support, Intensifying Instructional Delivery: - Teaching Skills and strategies - Providing additional practice with feedback - Offering more opportunities with a range of texts				
How to change instruction based on ongoing progress data				
How to teach all students, including those with disabilities **How to differentiate at all tiers based on assessment data**				
Prevention, what research says - learners who start behind stay behind				
In**tervention what research says about characteristics of effective intervention**				
How to select research-based instruction and intervention				
How to collaborate with stakeholders How to be on a team				
How to work with community agencies				
How to share assessment and instruction with parents				
Matching student needs to research based instruction				
Types of reading difficulty				
Reading disability - definition of dyslexia, how diagnosed				
How to identify disability with RtI data				
Communicating the essential elements of MTSS to parents and other stakeholders				
Engaging parents and other stakeholders in collaborative problem solving				

Part 2: Programmatic and Faculty Needs

Faculty Support				
Knowledge of **Ohio's processes, ELA standards OIP, resources**				
Overall system supports for implementation of Science of Reading				
Faculty has access to needed professional development & resources				
Cohesion across professors and willingness to plan and work together on the 12 hour core				
Common training in the science of reading (eg. LETRS)				
Common language				
Time for planning				
Plan to support adjuncts				

Planning Template

Reading Science Topic Area	Elements for Discussion	Elements for Course Development	Next Steps	Notes
How Students Learn to Read				
Essential Elements of Effective Instruction: What to Teach				
Essential Elements of Effective Instruction: How to Teach				
Collaborative Problem Solving and MTSS				
Faculty Support				