

**PRAXIS II™ Math and Science**  
**PRAX 114**

**passpraxis.com**

**Instructor:**

**Mrs. Laura Wilson**

Mrs. Laura Wilson is a certified teacher of Secondary Education Mathematics. Mrs. Wilson holds degrees in the Art of Teaching, Mathematics, Business Administration, and Engineering.

**Coordinator of Praxis Preparation Programs**

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**Location:**

<http://blackboard.bc3.edu>

**Course Description:**

This Praxis II™ course is designed for both elementary and secondary education teachers and teacher candidates preparing to take certain Math or English Praxis II™ exams necessary for state licensure. PRAX 114 prepares students and teachers for **one or more** of the following Praxis II exams:

***Secondary Education: Math Content Knowledge (0061)***

***Secondary Education: Biology Content Knowledge (0235)***

***Secondary Education: General Science Content Knowledge (0435)***

***Middle School Mathematics (0069)***

***Middle School Science (0439)***

This 5-week course provides a thorough review and numerous practice exercises for each content category covered on the above Praxis II exam(s). Study preparation tips and test-taking strategies are outlined as well. The online format offers flexibility to busy students and professionals. Group chats and discussion board forums allow class participants to communicate with each other and the instructor throughout the course. The courses focus on the following topics:

- **For Mathematics Content Knowledge (#0061):**  
Algebra and Number Theory; Measurement, Geometry and Trigonometry; Functions and Calculus; Data Analysis, Statistics, and Probability; Matrix Algebra and Discrete Math.
- **For Biology Content Knowledge (#0235):**  
Basic Principles of Science; Molecular and Cellular Biology; Classical Genetics and Evolution; Diversity of Life, Plants, and Animals; Ecology; Science, Technology, and Society.
- **For General Science: Content Knowledge (#0435):**  
Scientific Methodology, Techniques, and History; The Physical Sciences; The Life Sciences; The Earth Sciences; Science, Technology, and Society.
- **For Middle School Mathematics (#0069):**  
Arithmetic and Basic Algebra; Geometry and Measurement; Functions and Their

Graphs; Data, Probability, and Statistical Concepts; Discrete Mathematics; Strategies for Constructed Response/Problem-Solving Exercises.

- **For Middle School Science (#0439)**

Scientific Methodology, Techniques, and History; Basic Principles; Physical Sciences; Life Sciences; Earth/Space Sciences; Science, Technology, and Society; Strategies for Short Content Essays.

**Text:**

- **For Mathematics Content Knowledge (#0061):**

REA The Best Teacher's Test Preparation for Praxis II High School Mathematics (Test # 0061), by Mel Friedman

- **For Biology Content Knowledge (#0235):**

ETS Study Guide.

Barron's Let's Review Biology, the Living Environment (4<sup>th</sup> edition).

Cliffs Quick Review Biology.

- **For General Science (#0435):**

ETS Study Guide.

- **For Middle School Mathematics (#0069):**

REA The Best Teacher's Test Preparation for Middle School Mathematics (Test# 0069), by Mel Friedman

- **For Middle School Science (#0439):**

ETS Study Guide.

**Preparation for all middle school exams is in one text.**

**Additional Course Materials:** *(your instructor may suggest)*

- **For Mathematics Content Knowledge (#0061):**

Graphing Calculator required.

- **For Middle School Mathematics (#0069):**

Graphing Calculator recommended.

**Chat sessions: (These require students to be online at a specific time)**

Chat sessions are offered in the evenings, on different days for question/answer sessions with the instructor. Participation is not mandatory, but it will increase your chance of exam success.

**On-campus sessions:**

**None – All course work and exams are completed online.**

**Objectives:**

The student will:

- Review content for the major components of their appropriate PRAXIS II™ exams through texts, additional posted resources, practice questions and exams, chat sessions, and discussions in discussion board forums.
- Review websites pertinent to content areas.
- Complete and score practice Praxis questions, examinations, and skill quizzes.
- Identify lower and higher order thinking skills in the subject areas covered on the PRAXIS II™ Elementary Content Knowledge Test, CIA test or Subject Assessments/Specialty Area Tests. Categories in the Cognitive Domain of Bloom's Taxonomy (knowledge, comprehension, application, analysis, synthesis, and evaluation) will be used. Critical thinking skills will be improved.

- Interact through assignments, chats, and discussion boards with certified teachers in their specialty area using cooperative/collaborative learning, including peer review and problem based learning and inquiry.

**Additional Information:**

**Discussion Board:**

Forums are posted under “discussion board” to provide review for specific content areas and comments for tackling each topic in the most effective manner. Class participants are encouraged to post their own questions and concerns to the discussion board as well as interact with their peers.

More detailed course information is available online within the course.

\* Information contained in this document is subject to change.

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