Curriculum and Instruction Content Core: Science Emphasis

All questions should be written in appropriate academic style and voice. Please include specific, concrete details from your coursework, readings, research, and appropriate theories/theorists to support your answers. As time allows, please carefully reread and proofread your answers. Comprehensive exam questions encompass the key proficiency areas of the Curriculum & Instruction program; include references to coursework, research, and reading across your program of study as appropriate.

--Briefly describe your areas of licensure and the teaching position you currently hold.

I. Curriculum

Describe and defend the importance of educators understanding the philosophical, psychological, and historical foundations of curriculum development. What impact should research on curriculum have on professional decision-making within schools? Consider how curriculum reforms have both potential benefits and drawbacks for teachers and students within schools. Include concrete examples from professional readings and research.

II. Assessment

Describe two or three current “hot topics” within the field of assessment. Use research and your professional readings to discuss what we know about these issues within assessment and their potential impact upon student learning. Discuss several ways how these research-based assessment practices impact the teaching and learning cycle. How might you make decisions about using such methods in your own practice?
III. Literacy integration

Literacy learning is considered to be a foundational aspect of curriculum, instruction, and assessment across grade levels and disciplines. Discuss educational research’s findings about teachers’ use of literacy to support student engagement and authentic learning. Describe and evaluate several literacy platforms that can support rigorous learning outcomes and student engagement. Consider qualities such as materials/texts, strategies methods, and digital/visual literacy within your response findings about teachers’ use of literacy to support student engagement and authentic learning. Describe and evaluate several literacy platforms that can support rigorous learning outcomes and student engagement. Consider qualities such as materials/texts, strategies, methods, and digital/visual literacy within your response.

IV. Content Knowledge

As a science educator it is your responsibility to be competent in two worlds-science and science teaching and learning (science education). Describe three current issues, best practices or changes in science education and how that has influenced or changed your thinking about science education. Use content from science and science education courses, science education research, or other professional science education resources to support your response.

V. Professional Content Knowledge/Pedagogy

Drawing upon your MSED coursework, particularly within your content core classes, describe how your understandings of professional practice and content pedagogy have expanded as a result of your graduate studies. What new insights into research based practice, strategies, content pedagogy, and innovative teaching methods are now a part of your professional content knowledge? Cite specific readings and course experiences that support your answer. What might these practices look like in the field? How will you continue to grow your professional content knowledge and refine your professional practice?