

Comprehensive Content Manuscript (CCM)

The Comprehensive Content Manuscript (CCM) guidance will be assignment 4 in the secondary science methods class. This assignment is designed to provide the teacher candidate an opportunity to show the depth of knowledge needed in their content area.

Teacher candidates, acting as a science content area specialist for their discipline, will be tasked with choosing a past content focus for their investigation using one of the following disciplines: Biology, Chemistry, Earth and/or Environmental sciences, or Physical science.

Instructional planning and integration of the project will be guided by the secondary science methods instructor during SEC 506 (Advanced Theory and Practice in Teaching Secondary Methods) during the Fall Semester.

The CCM will reflect an investigational design employing authentic scientific investigatory principals. The manuscript must reflect a relevant theme representing current science, technology and society issues for investigation. Candidates will select the appropriate topic from their science content course within their specialization that demonstrates their depth of content knowledge.

The manuscript in the science content area will address and articulate the following tenants:

1. Title the CCM
2. Provide the Course Name and Instructor of Record
3. Address the Content Topic from a Historical Context
 - Use what you've learned from assignment one
 - One paragraph
4. Relevant Literature Review
 - Find at least five citations that are relevant to content and pedagogy
 - One-two paragraphs
5. Investigatory Questions
 - List question(s)
6. Inquiry Design with Safety Considerations
 - Describe the assignment
 - Are there any inquiry applications? If so, explain.
 - One paragraph
7. Analysis
 - Dependent on the work already done by the student
 - At least two paragraphs
8. Results
 - Dependent on the work already done by the student
 - At least two paragraphs
9. Limitations of Design
 - Dependent on the work already done by the student

- At least two paragraphs
10. Recommendations for Further Investigation
- Dependent on the work already done by the student
 - At least two paragraphs
11. Information Dissemination
- Provide some explanation as to how the information learned could be disseminated to high school students
 - One paragraph
12. Conclusions and Relevance to the North Carolina Standard Course of Study in Science
- Add standards
13. Nature of Scientific Endeavor
- Provide some explanation as to how the information address what we've learned about the Nature of Science and the tenants discussed this semester
14. Bibliography
- List the sources here