MATH 5393: Literature Review & Research Methodology

Section 002, Fall 2011, CRN: 48347

I. COURSE INFORMATION

Instructor: Joe Champion, Ph.D.
E-mail: joe.champion@tamucc.edu
Webpage: http://sci.tamucc.edu/~jchampion
Office location: Center for Instruction #359
Office phone: 361-825-3165
Office hours: Mon 3-5, Tue/Thu 1:30-3
Meeting place: Center for Sciences 107
Meeting times: Mondays 7-9:30pm

II. COURSE DESCRIPTION

Reading, analyzing, and synthesizing mathematics education research literature for the purpose of informing teaching practice. A study of qualitative research methods including interviews, case studies, and teaching experiments, with a focus on the components of a research study (research question(s), literature review, conceptual framework, methods, analysis, findings) and the relationships among them. All documents will use APA style.

III. PREREQUISITES for the COURSE

- Accepted in the MS Mathematics-Curriculum Content program and completion of all leveling work
- Successful completion of 18 hours in the program, specifically MATH 5321, 5325, 5326, 5327, 5328, and 5329

IV. INSTRUCTIONAL METHODS and ACTIVITIES

The course will consist of lecture, collaborative groups, class discussions, a field trip to the library and a guest speaker. Students are expected to participate in collaborative groups and whole class discussions by contributing knowledge and thoughtful evaluation of the contribution of others. It is very important that students critically and meaningfully provide feedback and comments on others' work during this course.

IV. TEXTS & OTHER SUPPLIES

- Mathematics Graduate Thesis/Project Guidelines

V. STUDENT LEARNING OUTCOMES
The student will be able to --

- Select an appropriate research topic and problem
- Formulate research questions, hypotheses or guiding principles
- Choose an appropriate research methodology for thesis or outline the method for completion of the curriculum project
- Conduct a literature review of the research problem or project
- Write/rewrite a thesis/project proposal and submit for critical review by peers and committee
- Defend their thesis/project proposal orally in front of committee and peers

VII. EVALUATION and GRADE ASSIGNMENT

<table>
<thead>
<tr>
<th>Completion level</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Excellent proposal &amp; defense</td>
<td>A</td>
</tr>
<tr>
<td>Satisfactory proposal &amp; defense</td>
<td>B</td>
</tr>
<tr>
<td>Incomplete proposal &amp; defense</td>
<td>IP (in process)</td>
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By the end of the course, you are expected to have your thesis or project proposal satisfactorily completed, defended successfully, signed by all three committee members, and corrected copies to appropriate parties. This will result in a grade for the course and will allow you to enroll in MATH 5995 or 5997 (thesis or project) for the next semester. Not completing your proposal or securing required signatures will result in a grade of IP (in progress) and you will again enroll in the course the next semester.

Upon receiving credit for this course, students must enroll in MATH 5995 or 5997 and continue that enrollment throughout each semester (Summer semester is optional) until the thesis or project is completed and signed by the committee.

VIII. TENTATIVE COURSE SCHEDULE

See course calendar at [http://math.tamucc.edu/~jchampion](http://math.tamucc.edu/~jchampion)

IX. CLASS POLICIES

Written work: It is expected that your written work will be excellent in spelling, grammar, and format. The Writing Center is available for help.

Attendance: Attendance is expected; please communicate promptly if you are unable to attend class. You are responsible for any work or learning missed.
**Academic Honesty.** University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, forgery or plagiarism.

**Notice to Students with Disabilities.** Texas A&M University-Corpus Christi complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. If you suspect that you may have a disability (physical impairment, learning disability, psychiatric disability, etc.), please contact the Services for Students with Disabilities Office, located in Driftwood 101, at 825-5816. If you need disability accommodations in this class, please see me as soon as possible.

**Grade Appeal Process.** As stated in University Rule 13.02.99.C2, Student Grade Appeals, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Rule 13.02.99.C2, Student Grade Appeals, and University Procedure 13.02.99.C1.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules Web site at [http://www.tamucc.edu/provost/university_rules/index.html](http://www.tamucc.edu/provost/university_rules/index.html). For assistance and/or guidance in the grade appeal process, students may contact the Office of Student Affairs.