SMFT 690-001  
Capstone Project Development  
Spring 2017  
T, 5:00-5:50 and online  
North Campus

Instructor: Dr. William Veal  
Office: Room 315, 86 Wentworth  
School of Education, Health, and Human Performance  
Contact Information: vealw@cofc.edu | 953-8045 (office)  
Please use email as a primary form of contact  
Course Meetings: Online  
Course Location: Online  
Office Hours: Email me anytime to setup an appointment.  
Skype: williamveal  
Pre-Requisite: EDFS 632 or permission of program chair

Course Description:
This course is meant to introduce SMFT Masters candidates to project development in social science research. The course introduces candidates to the ethics of human subject research. Ethical theory and principles are introduced, followed by a brief history of research ethics. Topics covered in lectures and moderated discussions include informed consent for research participation, role and function of institutional review boards, just selection of research subjects, ethical aspects of study design, and privacy and confidentiality. Candidate evaluation will be based on participation in moderated discussions, completion of readings, and a written Institutional Review Board (IRB) proposal. Candidates will also develop a research proposal to complete a social science investigation using human subjects. The proposal will include background information, a literature based rationale for the study, methods, plan of implementation, potential data analysis, consent forms, and instruments for data collection.

Course Format:
The 1-credit course will meet for one hour each week either online or in person.

3.2 Teaching Philosophy and Narrative Description:
This is a rigorous course designed for students to develop their thesis proposal with a sound methods section. Students should have a background in research methods and use it in developing their own study. Students are responsible for reading many articles in order to generate an appropriate theoretical framework and understand the background of their idea.

2.6 Student Learning Objectives:
The successful candidate will be able to:
- Develop a proposal with all attachments for the Institutional Review Board (IRB)
- Submit a capstone proposal into the electronic IRB system
- Complete Collaborative Institutional Training Initiative (CITI) training
- Develop a social science research proposal
Course Topics:
- Components of a good project proposal
- Ethical theory and principles
- History of research ethics
- Contemporary issues in research ethics
- Ethical issues in study design
- Informed consent in research
- Institutional Review Boards
- CITI training
- Selection of research participants

Communication Expectations

Expectations you should have of me:
- I will answer emails sent to me within 24 hours, except weekends/holidays.
- I will answer technical discussion boards within 48 hours, except weekends/holidays.
- I will answer other discussion board questions within 48 hours, except weekends/holidays.

My expectations of you:

You should expect to dedicate 2-3 times per week engaging with course materials (especially the discussion board) on OAKS, not including reading time, or time to complete assignments. If you go over 8 days without engaging the online material, including engaging with discussion with your peers, you will receive a WA for the course. Any exceptions due to location, contextual issues, and Internet access must be communicated to the professor ASAP.

You should read the information from online resources by day 5 of the week and post a discussion response by day 7. During day 6 or 7, you should be able to respond or reply to a classmate’s post. Discussion means commenting back and forth.

Online Communication
Since this is an online course, you will be required to participate in many online discussions with the professor and peers. In order to do this, we must build a community online that allows all to express their feelings, ideas, comments, and frustrations. The following are guidelines for participating in this online community:
- Everyone must comment in both number and quality;
- Polite and cordial argumentation is healthy;
- Respect what others have to say and cite others when appropriate;
- Do not attack a person, rather argue the idea.

Navigating Through the Course
I suggest the following in navigating through the course:
1. Start on the homepage with any announcements.
2. Look at the calendar to see if there are any items that are due.
3. Go to Content.
4. Follow the Module outlines from start to finish. You may go back at any time to reread the directions or content.
5. Each Module starts with objectives; see if you can finish these by the end of each Module.
6. Lectures & Readings contain the main ‘content’ and information for learning. You should be able to read all of the information, articles, or postings within the first 4 days of class.
7. Media Sources contains any video or audio support for the lectures and readings. These can be considered part of the content and information to learn.
8. Explore sections will include any activities that you will have to do alone, in pairs, or in groups. This is the action part of the course and you will be doing something; researching, arguing, constructing, posting, and responding.
9. Assignments will have all of the assignments that you are to complete, where to turn them in, and the due date.
10. Discussion will take you to the discussion board where you will find any discussion topics and threads to follow.

Format of Course Content

Introduction
This will highlight what is expected of you for the Unit. Each Unit will last 1-3 weeks in length. It will introduce the theme of the Unit and provide background for what you will do.

Explore
This section contains the PowerPoint presentations, notes, readings, and media that you are to read, cover, and learn. These are background items needed in order to do the assignments.

Assignments
Some Modules will have assignments. Specific due dates with instructions will be given at the beginning of each Module. Some assignments will require you to work in pairs or groups. The DropBox will be accessible to submit all assignments. Each assignment will have a specific method for labeling each assignment.

When you have a question that you would normally ask a classmate, use the OAKS discussion board called STUDENT LOUNGE. I will not be reading or answering those discussions, though you can choose to “escalate” an issue or question to the technical issues discussion board.

If you have a question about the module/assignments that are outside the content topics of discussion, post it to the OAKS discussion board called MODULE/ASSIGNMENT Qs. Use the assignment number in the subject heading of the discussion. I expect at least two posted responses before I make a contribution to that thread. I will respond in about 48 hours, unless an earlier response by me is warranted.

If you have a technical question about the course that would benefit others’ hearing your question, post it to the OAKS discussion board called TECHNOLOGY. I will respond within 48 hours—certainly students are invited to respond earlier, if they have a helpful response.

If you need to contact me about an issue that pertains only to you, please contact me via email.
Given the large amount of time you will spend on discussion boards, I want to be clear that respectful communication is **required**. For all of us to learn, everyone needs to feel they can share their reflections in a non-threatening environment. You can certainly critique ideas/assumptions of theories without being critical of a person’s feelings or identities. I expect you to take care (i.e., extra time) in how you express yourself in the online forum, to be sure your words are not mis-construed.

### 2.7 Attendance Policies

You access the class 2-3 times per week participating and responding to the discussions, and engaging with course materials (especially the discussion board) on OAKS; not including reading time or time to complete assignments. If you go over 8 days without engaging the online material, including engaging with discussion with your peers, you will receive a WA for the course. Any exceptions due to location, contextual issues, and Internet access must be communicated to the professor ASAP.

The point of contact will be the OAKS interface; all of our assignments, instructions, class materials, as well as the discussion board are all on OAKS. For the greatest success in this course, you must be able to “visit” with us on OAKS at least twice a week. If your internet access is compromised, you may need to reconsider if this is the right course for you. You should download the readings ahead of time in order to work offline.

Please be sure to check for class announcements on the News tab on OAKS; and you **must** check your college email account for any communications from me.

I have scheduled approximately 75-120 pages of reading per module (25-40 per week), in addition to links to videos/lectures that introduce and deepen our understanding of concepts from these readings. The videos and lectures are not required material since some of you will not be able to download. Instead, slides or PowerPoint will be used to summarize and present some content. Although we are online, this course is highly **interactive**—this is not the kind of class where you can read through materials, take a quiz, and be done with the work. You will spend a lot of time on the discussion boards for the course, working through the course content and the concepts needed to become familiar with the range of social science methods. A lot of what we will do is to learn from each other; we will discuss the readings assigned, post/answer questions on some of my lecture/materials.

Readings will be assigned from peer-review journals and books, all of which are available on OAKS. However, with the full citation in the syllabus, you have all the info you need to procure these readings from your campus library. All other lectures/class materials, and assignment instructions are available on OAKS. Students are **required** to draw from extra readings to develop their research designs particularly related to their specific background and theoretical framework. For example, if you want to study gender effects of a teaching method on a 7th grade math class, then your background will focus on middle school math learning, the type of instructional method, and gender studies. The theoretical framework will involve more reading and focus on why this is important? What drives the idea? What is the cognitive, behavioral, or philosophical understanding behind your research questions?

Academic honesty and professional ethics must be adhered to at all times. Please refer to the College’s policy on plagiarism and academic honesty; for a sample guideline of professional ethics, you can look at [http://www.aag.org/cs/about_aag/governance/statement_of_professional_ethics](http://www.aag.org/cs/about_aag/governance/statement_of_professional_ethics), but check your professional organization for its own ethics statements.
MAKE-UP EXAMINATIONS, PRESENTATIONS, AND QUIZZES:
If an examination or assignment (other than the final examination) was missed for a legitimate reason, as determined by the professor, the professor has the discretion to administer a make-up session or allow late work. It is the responsibility of the student to contact the professor within 48 hours and make arrangements for the make-up. This is to be done as soon as possible after the missed examination, presentation, or quiz. If accepted, late work or assignments will be reduced by a percentage determined by the professor.

FINAL EXAM: There is no final exam, but a capstone proposal is required in which a paper copy is submitted and an oral presentation is given to the faculty of the SMFT program.

2.8 Grading Policy and Assignments
Late submissions of assignments are unacceptable under normal circumstances. Please do not attempt to submit any assignments after the due date. I will NOT accept any late work. If assignments are turned in late, it is the discretion of the professor to determine the amount of points to be taken off the final grade. If needed, the professor will provide ample feedback on any assignment if the assignment is emailed to him at least 3-4 days prior to due date. All assignments are required to be uploaded to a designated DropBox in OAKS.

Any written assignment submitted is considered a final product that will be graded on both what is written (clarity, depth, and insight) and how it is written (the form of the written work). Therefore, it is crucial to realize that correct grammar and spelling, proper punctuation, adherence to assignment guidelines, and neatness will affect your grade. As an educator, you will be expected to demonstrate competency not only in verbal but also in written communication with parents, administrators, and other educators. Please use the resources around you to proofread and to edit your work. Rubrics for all assignments are provided on OAKS to assist you.

Evaluation
This course is based upon a “Master-based” evaluation system. All assignments are needed for full completion. Each assignment is evaluated for conceptual depth and meeting guidelines set forth by the SMFT program.

Evaluation Scale

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<thead>
<tr>
<th>Letter Grades</th>
<th>Percentage Range</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>91-100%</td>
<td>4.0</td>
</tr>
<tr>
<td>B+</td>
<td>89-90%</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>84-88%</td>
<td>3.0</td>
</tr>
<tr>
<td>C+</td>
<td>82-83%</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>77-81%</td>
<td>2.0</td>
</tr>
<tr>
<td>F</td>
<td>≤76%</td>
<td>0.0</td>
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2.9 Required and Optional Textbooks, Equipment, and Technology
Have appropriate technical skills to be an online student. One important resource for navigating OAKS is: http://blogs.cofc.edu/scs/archive/tutorials/ or http://blogs.cofc.edu/oaks/tutorials/

Another important resource to help fill gaps in your technical knowledge is: http://blogs.cofc.edu/studentreadinessforonlinelearning/ (I recommend that you take their online readiness quiz, to ensure you know whether you have any gaps—it’s likely you do!)
Textbook: There is no textbook required for this course. Readings are supplied online in OAKS.

Technology: Enrollment in this course requires you to utilize the following computer applications: PowerPoint, Excel, Internet/WWW, OAKS via Internet, e-mail, and Word Processing. These computer applications are available in the College of Charleston managed computer labs located in JC Long, the Library, and various other campus locations. If you do not have reliable access to these applications you should plan to use the campus computer laboratories.

2.10 ADA Accommodations for Students with Disabilities:
In compliance with the Americans Disabilities Act (ADA), all qualified students are entitled to “reasonable accommodations.” Any students requiring accommodations should contact the Center for Disability Services (953-1431) and provide me with documentation of needed accommodations within the first two weeks of the course or as soon as they find out about potential accommodations if determined mid semester.

Center for Student Learning: I encourage you to utilize the Center for Student Learning’s (CSL) academic support services for assistance in study strategies and course content. They offer tutoring, Supplemental Instruction, study skills appointments, and workshops. Students of all abilities have become more successful using these programs throughout their academic career and the services are available to you at no additional cost. For more information regarding these services please visit the CSL website at http://csl.cofc.edu or call (843)953-5635. The CSL, located on the first floor of the library, offers a wide variety of tutoring and other academic resources that support many courses offered at the College. Services include walk-in tutoring, by appointment tutoring, study strategies appointments, Peer Academic Coaching (PAC), and Supplemental Instruction (SI). All services are described and all lab schedules are posted on the CSL website http://csl.cofc.edu/.

Writing Lab: I encourage you to take advantage of the Writing Lab in the Center for Student Learning (Addlestone Library, first floor). Trained writing consultants can help with writing for all courses; they offer one-to-one consultations that address everything from brainstorming and developing ideas to crafting strong sentences and documenting sources. For more information, please call 843.953.5635 or visit http://csl.cofc.edu/labs/writing-lab/.

2.11 Academic Integrity & Honor System:
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved. Incidents where the instructor determines the student’s actions are related more to a misunderstanding will be handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed by both the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the X to be expunged. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.
Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information stored on a cell phone), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://www.cofc.edu/generaldocuments/handbook.pdf

As EDEE is a dual program, in that we certify candidates for teacher certification, professors reserve the right to document violations that would impact student certification (e.g., attendance problems in field experiences, methods courses, and clinical practice, professionalism in schools, etc.).

### 3.4 Examination and Assignment Due Dates

**Assignments:** There are four assignments that students must complete for full consideration of a grade. If any one of these assignments is not completed, the actual grade in the course will be reduced by a whole grade.

**Class Participation:** Within the Explore Module of the Units, you will find the readings, videos, notes, and presentations that you must read and absorb. In order to determine that you have completed these items, there will be a class discussion online. It is your responsibility to post some original comments and questions while responding to what others say.

**CITI Training:** Readings and discussion in class will prepare you to take an examination on conducting social science research with a school population of children and teachers. The evaluation is done externally from the College of Charleston at CITItraining.org.

**Capstone Proposal:** This proposal must be written during the course. Strict guidelines are given on the SMFT website. Additional resources are provided in course materials in and class discussions. Most students undergo 3-5 re-writes of their proposals. All major professors should be communicated with the proposals at different stages of its development.

**IRB Submission:** The proposal should be submitted in the form requested by the Office of Research and Grants Administration and the IRB submission process. All forms for participants and school district approval must be conceptualized. Full acceptance of the complete IRB is not needed for a grade. Submission of all items is needed.

**Due Dates:** Due dates for course assignments, as well as scheduled readings, are listed in the course calendar and syllabus. No LATE assignments will be accepted. If there is a problem with submitting the assignment on time, please contact the professor ahead of time to ask for an extension (only extenuating circumstances will be allowed). If assignments are turned in late, it is the discretion of the professor to determine the amount of points to be taken off the final grade. If needed, the professor will provide ample feedback on any assignment if the assignment is emailed to him at least 3-4 days prior to due date.
Discussing Online:

Posting to Discussion Boards:
The discussion boards will be the heart of the course. There are two types of content-related discussion boards: ones whose questions are designed by me, to help guide you through foundational concepts in each, and questions based on the readings/materials, designed by the discussion leader(s) for the course. You must engage with each of the two types of content-related discussion prompt, with a minimum of five posts for each module (in general, one post per 2 + 2). You need to be reading what others have posted, and thoughtfully engage with your peers, if you are not the first to reply to a discussion thread.

How to “engage” with the readings/lectures/videos: you can show evidence that you read/watched the assignments by developing a question of substance on the topic addressed in the reading. A “rambling” question or response shows you have not thought carefully about the material presented in the reading—and this would be considered a “poor quality” response. A “good quality” engagement will relate the readings both to the content of the course, as well as to the themes of the discussion. An “excellent quality” engagement might discuss an issue or the evidence/method brought up in the readings, using paraphrasing or even quoting one or more readings, and you will relate this deeper discussion to the question and to the course material of the module.

How to thoughtfully engage with your peers: You will not always be the first to respond to (or to ask) a discussion question. Therefore, I will look for evidence that you have thoughtfully engaged with the discussion points developed by your peers. A “poor peer engagement” would include very brief statements such as “I agree” or “I do not agree.” A “good peer engagement” shows you are paying attention to what others’ have written and contribute a further insight that can build upon what others already contributed. An “excellent peer engagement” can synthesize the discussion as a whole, and contribute insights to the group that deepen everyone’s comprehension of the material/topic.

3.3 Course Schedule:

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<tr>
<th>Unit</th>
<th>Topic</th>
<th>Readings / Activities</th>
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3.6 PROFESSIONAL BEHAVIOR/DISPOSITIONS: Candidates are responsible for all content and assignments for each class. They will be expected to demonstrate professional behaviors consistent with the following dispositions:

- The belief that all candidates can learn.
- Value and respect for difference.
- Value of positive human interaction.
- Intellectual curiosity and willingness to learn new knowledge.
- A commitment to inquiry, reflection and self-assessment.
- Value of responsible, collaborative, and cooperative work.
- Sensitivity to community and cultural context.
- Responsible and ethical practice

2.12 Program-Specific Elements

Capstone Proposal Guidelines

PROPOSALS: Proposals will be word processed using the style of the Publication Manual of the American Psychological Association (Fifth Edition, 2001). The College of Charleston does have a writing lab that can help you. They have a useful handout for using the APA Handbook. The hours of the lab are M-H 9-9 and F 9-12.

The capstone project is meant to provide each SMFT graduate student with experience identifying a critical need (pedagogical, curricular) or research question in science and math education, and formally proposing a project plan for addressing this need/question. The process of formally proposing a project will help you successfully plan and implement your project and
will be very much akin to that which you will experience in your professional life as leaders in science and math education within your community, school system, school district, state and/or region.

Prior to formally writing the capstone proposal, each student must select a project advisor who will guide the student through writing the capstone proposal and carrying out the project. If the capstone is a project added to an SMFT course then the advisor should be the instructor of that course. If the capstone is an independent project then the advisor can be any member of the SMFT Graduate Faculty. All students will take SMFT 690: Capstone Project Development. The students will pass CITI training for working with human subjects, learn about the IRB process, and write their proposal. Once the proposal is written it must be approved by the director of the SMFT Program and by one member of the SMFT Graduate Faculty other than the project director. If the project involves any work with students, then the project must also be approved by the appropriate supervisor at the host institution.

Students must plan their capstone project the semester before they carry out the work. They should submit the proposal to the program director early enough to allow time for revisions, which are frequently required.

The formal project proposal should contain the following sections:

**Cover page**, which includes a descriptive project title, the author's name, and contact information, and a place for the signature/date of approval of the proposal by the project advisor, the program director, other SMFT faculty member and host institution supervisor.

**Abstract** – This is a concise statement (500 words) that summarizes the goals and objectives for the project, the project's intellectual merit, the population affected by the project and the anticipated outcomes. This brief summary of the entire proposal is placed first but should be written last. There should not be any information in the abstract that is not included in the main body of the proposal. It is only a summary.

**Introduction** – In this section the student should address the intellectual merit of the project. This discussion should include:

- Briefly, what is your project.
- The aspect/problem/issue in science and/or math education that is the focus of the project, and what is the need for reform or change or research.
- How can your project make a difference?
- The community (public, families, teachers and/ or students) impacted by the project, and if applicable, the need for research/change/reform among this population.
- Again, how might your project make a difference?
- The evidence that reform/change or research into the proposed area of science and math education is needed. This part of the introduction should provide a brief (1-2 page) review of the pertinent literature.

**Project Goals and Objectives** – In this section of the capstone proposal the student should explain exactly what they plan to do and how they plan to do it. The section should include:
• The overarching goals for the project
• The incremental objectives that will be met along the way to achieve these goals.
• A description of the project plan and how the project goals and objectives will be met. In other words, tell as specifically as you can what you plan to do. Be as detailed as possible at this point. If you have to make changes as you are doing the project, that is OK, but you should show that you have thought about the details of what you intend to do.
• A project timetable for completion of each aspect (incremental objective) of the project.
• How the project relates to, and/or goes beyond or enhances/extends the South Carolina or National Science and Math Education Standards.

Anticipated Outcomes

• What will be the anticipated product (curriculum, teaching resources, research, etc.) of your capstone project?
• How will you know if the product has met your capstone project's goals?
• How will your product or research findings be disseminated to the community of science and math education professionals impacted by your project?

Literature Cited

• A literature cited section must be included. All literature should be cited using APA style formatting and should include parenthetical citations.
• All capstone proposals must be completed by the add/drop date of the semester in which the capstone project is to be completed. This may require some planning prior to the semester of capstone enrollment.

All capstone proposals must be signed by the project advisor prior to being submitted for final approval by the SMFT program director.

Paper Outline:
• Introduction –
• Background –
• Literature Review –
• Theoretical Framework – What is the theory that is guiding this research?
• Research Question or Description of Problem –
• Rationale or Justification for Project (Literature Review) –
• Research Design – (qual or quant; instruments; tests)
• Relation to SC Math and/or Science Standards –
• Timeline