

BIS 490 Senior Capstone Project Seminar

Overview:

The purpose of this course is to assist you in undertaking the research and writing process developed in your BIS 390 proposal and approved by the BIS Director and your faculty advisor. Course readings and assignments are designed to illustrate and provide experience in various components of the interdisciplinary research and writing process. Peer affinity groups contribute to the collaborative learning environment of BIS 490. The culmination of your reading, writing, and classroom activity this semester will be a completed BIS 490 Senior Capstone Project that you will present to faculty, peers, family, and community members typically with the support of BIS 491.

Co-requisite: BIS 491 Senior Project Presentation (1 credit)

BIS 490 meets the synthesis general education requirement. The purpose of the synthesis course is to provide students with the opportunity to synthesize the knowledge, skills and values gained from the general education curriculum. Synthesis courses strive to expand students' ability to master new content, think critically, and develop life-long learning skills across the disciplines.

Capstone Project

Students pursuing a degree through the Bachelor of Individualized Study (BIS) program are required to complete a final capstone project. The purpose of this evidenced-based project is for students to demonstrate their ability to critically analyze a problem related to their interdisciplinary concentration/major. The BIS 490 Capstone Course represents the culminating and integrating educational activity of BIS students. Using a research process, students acquire significant knowledge in areas directly related to their educational goals. By means of an investigative or creative project (see below), students in BIS 490 synthesize knowledge gained from the student's interdisciplinary program of study.

INVESTIGATIVE: The investigative option allows students to design and implement a critical analysis of a problem, issue, or topic that cannot be addressed adequately by just one discipline. The following components are expected in this type of project: introduction (purpose statement and interdisciplinary rationale), literature review, methodology/approach, analysis/ discussion, limitations, conclusions/recommendations. This type of project reports on research conducted by others via an extensive research paper (5000-word minimum).

CREATIVE: This option allows students the latitude to actually create a product that is closely connected to their core concentration. Products might be a multimedia presentation (CD ROM or Web-based), sculpture, musical score, theatrical production, novelette, or handbook, to name a few. As with both options, the student poses a problem/issue or need statement and develops research questions that will be answered in the development of the product. These creative projects still require a minimum of a 3500-word written component that includes an introduction (purpose statement and interdisciplinary rationale), literature review, methodology/approach, analysis/ discussion/reflection, conclusions/recommendations. The reflection component often is linked to the analysis/discussion section and is where authors explore the creative process as well as the challenges and limitations relative to the on-going development of the product.

Learning Objectives:

The objectives of this class are to:

- Complete an interdisciplinary capstone Project that synthesizes knowledge, theory and methodology from your concentration disciplines. This critical analysis paper will use an interdisciplinary approach or rationale and include multiple viewpoints from the different disciplines;
- Respond to a question that is significant to its relevant research community or communities. Appropriate questions are complex and demand examination from more than one disciplinary perspective (critical awareness);
- Demonstrate knowledge and a deep comprehension of the senior capstone subject (disciplinary grounding) and the ability to evaluate and identify relevant and reliable research;
- Demonstrate an awareness and reflectiveness about the strengths and limitations of interdisciplinary work as grounded in the Project.
- Prepare a well-written Project that incorporates and represents your perspective and critical analysis of the research materials and complies with the appropriate style manual for your disciplines;
- Demonstrate facility with methodologies, research tools, and the analytical and critical thinking skills necessary to explore, analyze and master the senior capstone project;
- Demonstrate an ability to apply the basic elements of the argument process
- Learn from and contribute to the learning of your peers through assigned affinity groups;
- Present your research process and product in class and at the Senior Project Presentations that are the culmination of BIS 491.

Required Materials:

- Booth, W.C., Colomb, G.G., & Williams, J.M. (2003). *The craft of research* (2nd ed.). Chicago: University of Chicago Press.
- Rosen, L.J. (2009). *The academic writer's handbook* (2nd ed.). White Plains, NY: Longman.

Strongly Recommended:

- *The citation and style handbook for your discipline*

Course Schedule**September 2nd (Week 1): Introduction, Overview of Course, and Getting Re-Started****Assignment Due on First Day of Class:**

- (1) Complete info sheet emailed to you and bring to class;
- (2) Prepare a 5 minute explanation of your Project; This should include the type of capstone project (investigative or creative), disciplines involved, the claim, the rationale for your claim, and the methodology and methods for analysis or project development.
- (3) One hard copy of your final approved 390 Proposal.

IMPORTANT - During class, we will establish peer affinity pairings and place students into Group A or B. These groups will work together for the duration of the semester. Every member of the peer affinity group has a responsibility to each other as a reader, reviewer, and critic of works shared both in-class and on-line.

September 9th (Week 2): Interdisciplinarity and the Integrative process**Reading:**

- (1) Case Studies (490 papers on Blackboard)

Assignment Due:

- (1) Paper Introduction (2 to 4 pages, double spaced – bring two hard copies: one for me and one for group review)
- (2) Mentor Status Form (Attachment A) – to be completed by your faculty mentor
- (3) Redo your project timeline – know exactly when all assignments are due and account for them on your timeline

September 16th (Week 3): No class—writing time

Reading: Review - Booth Chapters 6 – 14 (Even if you've read it before, read it again.)

WRITING TIME MEANS EXACTLY THAT. JUST BECAUSE YOU ARE NOT IN CLASS DOES NOT MEAN YOU SHOULDN'T BE WORKING ON YOUR PROJECT. THIS IS AN INDEPENDENT STUDY CLASS WITH AN IN-CLASS COMPONENT. YOU ARE RESPONSIBLE FOR MANAGING YOUR CLASS TIME AND WORKLOAD.

November 11th (Week 11): Group A Individual Meetings (20 minute sessions)
Group B – Writing Time (No Class)

Assignment Due:

- (1) Complete draft is due. Send copy to instructor electronically by 4:30pm. If you are scheduled for individual meeting, bring hard copy to meeting.
- (2) **Mentor Project Review Sheet (Attachment B) – send a copy of your rough draft to your Mentor. Request feedback by no later than December 2nd via email. Forward feedback from Mentor to instructor electronically. (This is student’s responsibility to stay on top of their Mentor!)**

November 18th (Week 12): Group B Individual Meetings (20 minute sessions)
Group A – Writing Time (No Class)

Assignment Due: If you are scheduled for individual meeting, bring hard copy of complete draft to meeting.

November 25th No Class – Thanksgiving Holiday

December 2nd (Week 13): Writing Time (This is crunch time!)

Individual meetings can also be scheduled for anyone who needs it.

December 9th (Week 14): In-class Presentations

Assignment Due:

- (1) Final project is due with faculty mentor comments and Attachment B.
- (2) 5 minute in-class presentation of the conclusion you’ve reached and the journey involved in reaching it. No visual aid is required, just be ready to talk about your project and your journey.
- (3) Discussion of the BIS experience with BIS advisors.

Assignments

Paper Introduction:

This assignment requires you to think about your project from the multiple disciplinary perspectives you have identified in your project proposal. Using the project description from your proposal as a starting point, begin to introduce your topic. The introduction should contain:

- A clear claim or thesis statement
- Specific and convincing rationale and significance for the research
- A discussion of the relevant disciplinary perspectives that inform your topic
- Discussion of the research approach or framework: your plan to integrate the literature and analyze the findings to support your argument.

The assignment will be evaluated based on the rubric given to you on the first day of class and is also on Blackboard. Length: approximately 3 to 4 pages.

Annotated Bibliography:

The annotated bibliography will include 10 NEW annotations with full bibliographic citations. Please attach the 30 annotated bibliographies done in BIS 390. This is NOT a copy of the abstract in the article or the summary on the back book cover! The annotations should be at least 2 FULL paragraphs and include the following information:

- Paragraph One: Overview of the book or article content
- Paragraph Two: How the book or article is helpful/useful in your research paper

Literature Review Outline:

The literature review outline is a detailed outline that includes all the components of the background and discussion of the topic. Remember the literature review sets up the argument process by including reasons and evidence that supports the thesis. This section helps create the foundation for the development of your investigative analysis or project creation. Length: approximately 4 to 5 pages.

Literature Review:

This is the bulk of your paper. It is the background, argument, methodology, and analysis. Your methodology should be clear in how you set up your argument. Your analysis must be reasonably deduced from your sources. Your argument must be strongly supported. Length: as long as it needs to be but ranging from 10 to 20 pages. (Creative projects would be on the shorter end of the range.)

Final Paper:

Introduction, Literature Review, conclusion, references, and creative project, if applicable.

Participation and Peer Group Support:

Participation is key in this course. You need to attend class, and you need to attend class with the assignments completed to get and give feedback. Your grade will be impacted if you miss class and/or come to class unprepared and/or without assignments. Peer group support will be a huge part of your development as a researcher, writer, and critical thinker. The peers in your group will look to you for guidance, critical feedback, and emotional support. It is essential you come to class prepared to provide critical and caring feedback. Be prepared to also receive guidance and critical feedback. Most importantly, please be willing to also ask and accept the emotional support offered during the semester. The kind of writing and thinking you will be doing can be very lonely work—please reach out to your peer group and accept the help that is willingly offered.

Course Guidelines

Since this course incorporates active and collaborative learning strategies, class attendance is very important. As this class is taught in a seminar/discussion format, its success depends on active and sustained participation by all those in the course. The more each person participates, the more learning will take place for everyone. Each person has a responsibility to the members of his or her peer affinity group. If you miss a class, you not only shortchange yourself, but your colleagues.

Grading Criteria

Your work will be evaluated according to the following general guidelines:

Outstanding: Work reflected consistent engagement throughout the term. Has shown excellent progress in working on the project. Assignments were thorough and thoughtfully completed, often reflecting additional work, insight, or integration of ideas. Assignments were completed on time and reflect a sense how each piece of work builds on the previous assignments. Substantial progress was made in the majority of areas related to the project. Individual could be counted on to be prepared for class, contributed thoughtfully and constructively to the class discussions, and was actively involved throughout the course. Individual showed increasing sophistication in integrating the general ideas discussed in class discussions as it related to his/her own project. (Range of grades: A, A-)

Good: Work reflected usual engagement with the course throughout the term. Has shown good progress in some areas related to project. Assignments were routinely completed on time, were complete and showed some additional work, insight, or integration of the topics being discussed. At times, assignments reflected a sense of how each piece of work builds on the previous assignments. Individual was often prepared for class, usually contributed thoughtfully to the class discussions, and was regularly involved in the course. Individual showed reasonable facility in integrating the general ideas discussed in class discussions as it related to his/her own project. (Range of grades: B+, B, B-)

Average: Work reflected some engagement with the course throughout the term. Glimmers of progress in some areas were not consistently maintained throughout the term. Assignments were routinely completed and submitted on time, but only occasionally reflected additional work, insights, or integration of topics being discussed. All required assignments for the course were submitted. Only occasionally was the sense conveyed that topics throughout the course built on each other. Individual was sometimes prepared for class, occasionally contributed to the class discussions. Individual showed only occasional integration of general ideas into his/her own project. (Range of grades: C+, C, C-)

Poor: Work showed highly inconsistent engagement with course throughout the term. Little if any progress was made in various areas related to project. Assignments were occasionally completed on time, but often submitted late. Not all required assignments for the course were submitted. Assignments rarely reflected additional work insights or integration of topics being discussed and were completed in a perfunctory fashion. The sense that topics built on each other throughout the course was rarely reflected in assignments. Individual was usually unprepared for class, and rarely contributed to the class discussions. Individual rarely showed integration of general ideas into his/her own project. (Grade: D)

Inadequate: Individual failed to complete a significant portion of the course assignments, regularly missed class, was rarely prepared for class when s/he attended. Individual rarely contributed to the class discussions. Assignments were usually submitted late or not submitted at all. Final course materials were not submitted when due. Individual showed no engagement with the class and reflected little understanding of the material. (Grade: F)

Because of the importance of keeping up with assignments in a timely manner, your grade will reflect your attention to this. You must contact me prior to the due date of an assignment in order to request an

extension. Requests for extensions must include a proposed date for the submission of completed materials. Late work cannot receive full credit.

Late Work: If you must turn in work after the due date, you must inform me. I understand life happens, and sometimes additional time is necessary. However, repeated late or incomplete work will result in your grade being lowered based on the criteria above.

Your final grade in the course will be based upon:

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|---|-----|
| • Project | 50% |
| • Introductory Paper | 10% |
| • Annotated Bibliography | 5% |
| • Literature review outline | 10% |
| • Class participation:
Peer group participation, and Attendance, | 25% |

At the beginning of class students will write for 10 minutes in a blue book purchased from the bookstore. Please purchase at least two to start. The writing is to capture how you are feeling about your project, paper, or progress. The writing is an opportunity to voice concerns and frustrations about your research or academic writing process, to ask for feedback, or to ask questions. The books will be collected and returned the next class time with comments.

Academic Honesty

GMU has an Honor Code with clear guidelines regarding academic integrity. Three fundamental principles must be followed at all times: 1) all work submitted should be your own; 2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and 3) if you are uncertain about what is appropriate for a particular assignment, *ask for clarification*. No grade is important enough to justify academic misconduct. Plagiarism means using someone else's words, opinions, or factual information without given the person credit. Plagiarism is the equivalent of intellectual robbery and **will not be tolerated in the academic setting**. Any student caught writing a paper for someone else or copying from another source (e.g., a published article) will be reported to the University's Honor Council.

University Resources and Assistance

Writing Center

<http://writingcenter.gmu.edu>

703-993-1200

Robinson A 114

The Writing Center provides tutors who can help you develop ideas and revise papers at no charge. It can sometimes accommodate walk-ins, but generally it is best to call for an appointment. The services of the Writing Center are also available online.

Disability Resource Center

www.gmu.edu/student/drc/

703-993-2472

SUB I, Room 222

The Disability Resource Center assists students with learning or physical conditions affecting learning. If you have a disability documented by the Disability Resource Center that requires special conditions for exams or other writing assignments, please see me the first week of classes.

GMU Libraries

<http://library.gmu.edu>

The GMU Libraries employ Librarians who serve can help you find information to support your project. Each Librarian is a subject specialist and can help with research topics of any area or discipline. The Library's web site provides electronic access to journal databases and many other resources.

IN CASE OF EMERGENCY

The Mason Alert system provides emergency information of various sorts. Students may sign up for it by visiting the website <https://alert.gmu.edu> Emergency posters are displayed in each classroom explaining what to do in the event of crises. Additional information about emergency procedures can be found at: <http://www.gmu.edu/service/cert/>

LESSONS LEARNED

1. Where you think you are taking this project is not where it is going.
2. Learn the proper use of commas.
3. The annotated bibliographies are well worth the work.
4. Coffee and chocolate are wonderful writing companions.
5. Be flexible. Rigidity closes off new areas to be explored.
6. Find an organization system that works for you.
7. The amount of uncertainty that is involved with this project can be overcome.
8. Learn to like the words revise, revise, revise.
9. Reference your citations as you go—do not wait until the end.
10. Continue to refer to the syllabus.
11. Don't begrudge the annotated bibliography. This will save your life when you get writer's block. Revisit it for ideas and connections.
12. Really listen to what your peer group members have to say about your project. They will find mistakes you cannot find.
13. Pay attention in class. Asking questions that have just been asked and answered is not a good use of class time and really irritates your peers.
14. When you are sick of reading about your topic—read some more.
15. Take ownership over your relationship with your faculty mentor—you will only get out of it what you put in.
16. Take advantage of the independent writing times. Do not use these as "days off". You will fall behind and you will be sorry in the end.

Attachment A
Mentor Status Form

To be filled out by BIS student

BIS Student Name:

Concentration:

Project Title:

BIS 490 Instructor Name:

BIS 490 Instructor contact information:

Project Reader Name:

Reader Email:

To be filled out by Faculty Mentor

Mentor name:

Department:

Preferred mode of contact:

Frequency of meetings and/or correspondence with student?

Assessment of progress made on Project?

Is the student on track with his or her 490 project timetable?

Are there any concerns you would like to share with the BIS instructor?

Any additional comments:

Attachment B
Mentor Project Review Sheet
Mentor Project Review Sheet

Student Name:

Reviewer:

Criteria	Developing	Competent	Exemplary
Clear purpose statement or thesis	*Research question is hard to detect. *Missing or ineffective statement about the project taking an interdisciplinary approach.	*Clear statement of research question. *Claims an interdisciplinary approach is appropriate.	*Concise, clear statement of research question. *Issue is described in a way that makes an interdisciplinary approach appropriate.
Project question is significant to specific scholarly research community(ies)	*Importance of question not explored. *Ambiguous or misconstrued audience. *Literature review has gaps.	*Importance of project stated, but not fully supported. *Clear audience. *Strong literature review.	*Clear argument regarding the significance/importance of project. *Clear audience. *Comprehensive literature review.
Project question draws on at least two disciplines	*Disciplines used are not connected to concentration. *Disciplines are not stated explicitly.	*Connection of project topic to concentration is not readily clear. *Disciplines used in project are clearly stated.	*Project topic is explicitly connected to concentration in introduction. *Disciplines used in project clearly stated in introduction.
Identifies and evaluates relevant and reliable research	*Does not use scholarly literature from more than one discipline. *Overuse of popular or trade literature without justification.	*Literature from two or more disciplines represented, but imbalanced (without justification). *Literature from popular or trade sources explained.	*Uses scholarly literature from relevant disciplines. *Literature from popular or trade sources is contextualized for the reader; their use is clearly justified.
Demonstrates disciplinary grounding	*Extreme overreliance on one disciplinary literature over another. *Misconceptions of literature cited. *Relies too much on quotations to communicate complex disciplinary ideas. *Many claims are not supported with evidence.	*Uses scholarly literature to explore and report on project context. *Able to use disciplinary concepts, provide explanations or descriptions. *Most claims are supported with evidence.	*Uses scholarly literature to explore and understand context of project (lit review). *Excellent facility with disciplinary concepts, explanations, or descriptions; able to use own words. *All claims are supported with evidence.
Project incorporates and represents student's own perspective; demonstrates synthesis and critical analysis of the research materials	*Research is reported and summarized without analysis. *Little evidence of critical thinking. *Accepts one disciplinary perspective without justification or questioning.	*Research is analyzed. *Demonstrates some critical thinking about the disciplinary perspectives used in the project. *Attempts to arrive at a new understanding of	*Research is analyzed, synthesized, and used in service of the project. *Demonstrates critical thinking regarding the disciplinary perspectives used in the project. *Interprets and

	*Little or no evidence of student's perspective or "take" on the project topic.	the disciplinary perspectives used.	interrogates disciplinary materials. *Offers his/her own perspective or interpretation of the research informing the project topic.
Uses a clear analytical framework or methodology	*Analytical framework used is not clear or may be absent.	*Use of analytical framework is clear, but not stated explicitly.	*Explicitly explains the analytical framework used in project (compare/contrast; case study; integration of existing research)
Evidence of interdisciplinary integration	*No effort to frame analysis with an integrative device. *The role of an interdisciplinary approach is not addressed in terms of overall understanding.	*Attempts to use an integrative device: conceptual framework, graphics, model, metaphor, complex explanation, solution to problem. *Asserts that understanding has been enhanced by an interdisciplinary approach.	*Clear and effective use of an integrative device: conceptual framework, graphics, model, metaphor, complex explanation, solution to problem. *Evidence that understanding has been enhanced by an interdisciplinary approach.
Demonstrates critical awareness	*Does not acknowledge any limitations to project. *CREATIVE: Little evidence of ongoing reflection during the production of the creative product.	*Acknowledges limitations to chosen interdisciplinary approach, but without much reflection. *Does not acknowledge limitations of overall project. *CREATIVE: Evidence of ongoing reflection during the production of the creative product.	*Acknowledges limitations to chosen interdisciplinary approach. *Acknowledges limitations of overall project. *CREATIVE: Evidence of ongoing, substantive reflection during the production of the creative product.
Demonstrates an ability to draw and support conclusions	*Recommendations and/or conclusions are vague and disconnected from the analysis.	*Recommendations and/or conclusions are clear and linked to analysis.	*Makes clear, insightful recommendations and/or conclusions linked to analysis (i.e., the analysis leads somewhere).
Project is well-written, clearly structured and organized; appropriate length	*Introduction is too brief; missing interdisciplinary rationale. *Organizational flow is flawed and hard to follow. *Paragraphs are often too short or too long with ineffective transitions. *Does not comply with length requirements.	*Introduction is clear with interdisciplinary rationale. *Organizational flow may have a few choppy parts. *Paragraphs are strong, but some transitions are ineffective. *Complies with length requirements.	*Clear, effective introduction with interdisciplinary rationale. *Organizational flow is easy to follow. *Paragraphs use clear topic sentences and transitions. *Complies with length requirements.
Strong grammar, spelling, punctuation, and language use	*Spelling, grammar, and punctuation errors are numerous and detract from	*Few errors in spelling, grammar, or punctuation; easy to	*Very few errors in spelling, grammar, or punctuation.

	comprehension of project.	read.	
Appropriate use of citation and style for discipline	<ul style="list-style-type: none"> *Many errors in in-text citations. *Sloppy, inconsistent format in references/bibliography. *Mismatch of sources used and those included in references. 	<ul style="list-style-type: none"> *Few errors in in-text citations. *Few errors in reference/bibliography entries. *List of references matches works actually cited in paper. 	<ul style="list-style-type: none"> *No errors in in-text citations. *No errors in reference/bibliography entries. *List of references matches works actually cited in paper.

Other substantive comments: