BSC 595 Research Literature & Techniques,

COURSE SYLLABUS: Spring 2020

INSTRUCTOR INFORMATION

Instructor: Larry F. Lemanski, Ph.D.
Office Location: Science Building (STC), 226
Office Hours: TWR 9:00 am-11:00 am
Office Phone: 903-886-5378
Office Fax: 903-886-5997
University Email Address: Larry.Lemanski@tamuc.edu
Preferred Form of Communication: Email
Communication Response Time: Less than 72 hours for emails (excluding weekends and Holidays)

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Recommended: No textbook required
Software Required: Please see technology requirements.

Optional Texts and/or Materials: N/A

Course Description

This course is designed for the non-thesis option students in the last semester of their MS in Biology program. Upon satisfactory completion of this course the students are deemed to have met all the academic requirements for graduation. This course has three major components. The first component will consist of a weekly learning activity on the major aspects of scientific literature review related to a topic to be selected by each student from a range of broad topic areas provided by the instructor of record. The second one is the integration of the information obtained on the selected topic and production of a scientific research paper. The third part will be a comprehensive exit examination that will contain questions from at least five graduate courses offered by the Department of Biological and Environment Sciences.

1. Research literature coursework

This coursework is designed to provide graduate students with fundamental knowledge and working experience in gathering scientific information and producing a systematic review from a variety of authentic sources in a selected area. In addition to independently writing and submitting assignments, students will also learn some major aspects of writing an insightful scientific review. One major purpose of this course is to improve written communication skills of the students. There will be short power point files on major areas in the process of preparing and writing a scientific review paper in a professional scientific format.

2. Production of a scientific research review paper

The first step will be the identification of a topic for the review. The topic will be selected in consultation with the instructor from the broad areas provided. Once the topic is finalized, before the set deadline, the student will start working on the review and will submit a complete draft for review to the instructor before the set deadline. The instructor will provide feedback or corrections as necessary. The student is expected to address all the concerns/corrections and will submit the final copy of the review before a set deadline. Check the course schedule for the deadlines.

3. Comprehensive exit examination

Students are expected to take a comprehensive exit exam as a part of the BSC 595 course and as a requirement for graduation by WEEK 12 of the semester. Questions for different courses will be prepared by the faculty teaching each graduate course. Each student will select at least five graduate courses related to their discipline within biology for this exam. Therefore, not all the students will have the same set of questions. Students are expected to dedicate time each week for reading, writing, and practicing the skills we cover in this course.

Student Learning Outcomes

After successfully completing this course, the student will be able to:
1. Define literature review and understand the concept of systematic review.
2. Understand the differences between traditional reviews and systematic reviews.
3. Describe the main steps associated with the review process and understand the importance of setting a timeline.
4. Define the scope of the review and write the review within that scope.
5. Understand the search concepts and practice data mining.
6. Identify the importance of assessing the relevance of information gathered.
7. Describe the steps associated with the synthesis of collected information.
8. Understand the methods of analysis and integration of findings.

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9. Describe the main elements required when writing and presenting the review.
10. Produce an insightful research review.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

Standard skills necessary to use web browsers to access course materials are required. Students should also be able to submit their work as necessary. Students should be able to use Microsoft Word and PowerPoint

Instructional Methods

This course is being offered as a "Web Based" course. All course materials will be posted in D2L. The course consists of a series of activities and assessments to assist you in achieving the outcomes for all instructional units in the course. In case of any difficulty in accessing or understanding any course material, contact me immediately via e-mail.

Student Responsibilities or Tips for Success in the Course

Submitting assignments before deadlines;
Studying previous course materials to take exit exams;
Students are encouraged to take as many exams as possible rather than taking the minimum required number of exams;
Checking both course page and emails for course related announcements;
Take assigned written Exams;
Log into the course website, regularly;
Complete the assigned weekly studies.

Learning strategies

Reading assignments;
Analyses of Study Materials;
Individual work;
Analyses of reading assignments.

Assumptions, Expectations, Philosophy

Reading and assimilating information is a critical part of your current and continuing education. This will help you become a better writer, a more rounded individual, and expose you to subjects outside of your immediate knowledge.

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Assessments

There will be three types of assessments that will contribute to the grade. These are:
1. Research literature coursework assignments; there will be six assignments.
2. Scientific literature review (essay)
3. Meeting deadlines

A passing grade (30/50 or 60%) in the Comprehensive exit exam is required for BSC 595 course completion and graduation. This score is also utilized as one of the assessment tools for Institutional Effectiveness of the graduate program. **This score is not counted towards the course grade.**

Important information:
1. All assignments should be submitted before the deadlines. Late submissions will receive ZERO points.
2. There will be no extra credit points for offering to do additional work. A student's grade will be based exclusively on the points he/she earns in the categories listed above.

Formatting Guidelines:[*]
Assignments: paper size – letter; margins – 1" all sides; font size – 12; font types – Times New Roman, Arial or Calibri only; line spacing – single; page limits – one page only; file format – MS Word (Don't convert your file to a PDF).
Review paper/essay: paper size – letter; margins – 1" all sides; font size – 12; font types – Times New Roman, Arial or Calibri only; line spacing – double; page limits – minimum 20, maximum 30, excluding form pages, figures and table, and bibliography/list of references; file format – MS Word only.

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*Submissions not conforming to these guidelines will not be accepted and graded.

Grading:
Assignments	60%
Meeting deadlines	10%
Review paper/Essay	30%
Comprehensive exit exam	0% (Not counted towards the course grade)

1. If a student submits all the assignments before the deadline, he/she will get 10%. For each late submission 2% will be deducted. Therefore, consistent late submission of the assignments may result in a deduction of up to one letter grade.
2. There will be six assignments and each one will contribute 10% to the final grade in the course.

Assignment grading plan:
Presentation of a clear purpose	2%
Main idea	2%
Organization	2%
Style and conclusions	2%
Grammar	2%

TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

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Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
    - 512 MB of RAM, 1 GB or more preferred
    - Broadband connection required courses are heavily video intensive
    - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- **For YouSeeU Sync Meeting sessions *8 Mbps* is required.** Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

- You must have a:
    - Sound card, which is usually integrated into your desktop or laptop computer
    - Speakers or headphones.
    - *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning

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management system. The most current version of Java can be downloaded at:
JAVA web site http://www.java.com/en/download/manual.jsp

- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
> Pop-ups are allowed.
> JavaScript is enabled.
> Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - Adobe Reader https://get.adobe.com/reader/
  - Adobe Flash Player *(version 17 or later)* https://get.adobe.com/flashplayer/
  - Adobe Shockwave Player   https://get.adobe.com/shockwave/
  - Apple Quick Time   http://www.apple.com/quicktime/download/

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu**.**

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements.

LMS Requirements:
https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:
https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

YouSeeU Virtual Classroom Requirements:
https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

COMMUNICATION AND SUPPORT
Brightspace Support
Need Help?
Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.

 Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

Students are encouraged to interact with the instructor during active classroom learning sessions. Response time for Response time to any questions sent by email regarding the course will be within 72 hours. Weekends and holidays are excluded. Students need to use the office hours indicated in this syllabus.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:
https://www.britannica.com/topic/netiquette

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu
Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR (Fall 2020)

Week 1 Jan 13-17: Chapter 1: Introduction to literature review; importance of review in scientific research; how to review a scientific paper.

Identify and finalize the topic for Research Literature Review **Assignment 1 Deadline:** Submit your selected topic for instructor's approval 01/17/2020; 11:59 PM, CST

Week 2 Jan 20-24: Continuation of Chapter 1
Prepare a synopsis of a research article for peer-review. Each student's synopsis will be reviewed by two other students enrolled in the course.
Assignment 2 Deadline: Submit research paper synopsis by 01/24/2020, 11:59 PM

Week 3 Jan 27-31: Chapter 2: Approaches for literature review
Identification of the types of research; structure of research articles.
Assignment 3 Deadline: Submit peer-review by 01/31/2020, 11:59 PM, CST.

Week 4 Feb 3-7: Continuation of Chapter 2
Assignment 4 Deadline: Submit a working outline of the review paper by 02/07/2020, 11:59 PM CST.

Week 5 Feb 10-14: Chapter 3: Planning and preparation of literature review; avoiding plagiarism.

Week 6 Feb 17-21: Chapter 4: Identifying and defining the scope of the review. **Assignment 5 Deadline:** Submit complete Introduction by 02/21/2020, 11:59 PM CST.

Week 7 Feb 24-28:	Chapter 5: Literature search methods.
Week 8 Mar 2-6:	Chapter 6: Assessment of scientific evidence and findings **Assignment 6 Deadline:** Submit a complete summary of the research review paper by 03/06/2020, 11:59 PM CST.

Week 9 Mar 9-13 Spring Break

Week 10 Mar 16-20:	Chapter 7: Analysis of information
Week 11 Mar 23-27:	**Review paper deadline:** Submit the final complete draft of the research review paper by 03/27/2020 11:59 PM CDT
Week 12 Mar 30-Apr 3:	**Comprehensive Exit Exam (Final Deadline: by 04/03/2020 11: 59 PM CDT)—Advisor certification is required three weeks before the end of the semester for graduation**
Week 13 Apr 6-10	Chapter 8: Synthesis of included research literature; referencing styles; structure of abstracts; credits for other sources
Week 14 Apr 13-17:	Chapter 9: Writing up and presenting data
Weeks 15/16 Apr 20-May1	**Deadline:** Submission of final copy of the review paper by 05/01/2020 11:59 CDT
May 8, 2020	**Spring Graduate Commencement**

*Please check the academic calendar for details on holidays and start and end dates of the current semester. First day of class is January 13, 2020. Deadlines are posted in advance. ALL DATES AND CHAPTERS COVERED ARE TENTATIVE AND SUBJECT TO CHANGE.

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