Welcome to Research Design!

Psychology is a science. This course is designed to help you think like a scientist and become a critical consumer and producer of psychological research. I truly believe that Research Design can be one of the most useful, rewarding, and enjoyable courses of your college career!

COURSE DESCRIPTION

This course identifies research methods emphasizing use of experimental control and analysis of data for reporting experimental results in the psychological study of human and nonhuman behavior.

PREREQUISITES

PSYC 3330 with a grade of C or higher and consent of instructor.

REQUIRED READING


ISBN-10: 1319254373

PROGRAM LEARNING OUTCOMES

<table>
<thead>
<tr>
<th>Program Learning Outcomes (PLOs)</th>
<th>Proficiency Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student will demonstrate familiarity with the major concepts, theoretical perspectives,</td>
<td>Advanced</td>
</tr>
<tr>
<td>empirical findings, and historical trends in psychology.</td>
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<tr>
<td>The student will understand and apply basic research methods in psychology, including research</td>
<td>Mastery</td>
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<tr>
<td>design, data analysis, and interpretation.</td>
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<tr>
<td>The student will respect and use critical and creative thinking, skeptical inquiry, and,</td>
<td>Mastery</td>
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<tr>
<td>when possible, the scientific approach to solve problems related to behavior</td>
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</tbody>
</table>
and mental processes.

| The student will understand and apply psychological principles to personal, social, and organizational issues. | Advanced |
| The student will value empirical evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a science. | Mastery |

STUDENT LEARNING OUTCOMES

By the end of this course, students should be able to:

1. Understand the major concepts involved in designing and conducting research;
2. Articulate how psychological research is conducted and how it informs our understanding of human behavior;
3. Critically evaluate empirical findings in the psychological literature; and
4. Apply the designs and concepts learned in class to real world experiences and your own life.

COURSE FORMAT

This class is primarily online lecture with occasional livestream meetings (see “Course Schedule” below), with both parts being vital to your development as a psychology student and to your final grade. During the lecture portion of the course, we will discuss multiple topics relating to research design. The livestream meetings are designed for you to practice reading and writing journal articles, to analyze raw data (using Jamovi, a statistical analysis program [Note: Jamovi may only run on a Windows PC, not a Mac or other operating system; please plan accordingly]), and to design an experiment from start to finish based on the information you learn during lecture.

COURSE REQUIREMENTS

1. Attendance: Attendance (i.e., logging into the course Brightspace site) is mandatory, because you need to be active participants in this course. Discussions and class exercises may be the most valuable part of your learning.

2. Assigned Reading and Viewing: You are responsible for reading or viewing the assigned materials, in their entirety, prior to the completion of the quiz for which they are assigned. For each module, come to class ready to teach us something you’ve learned from the readings, and with at least a couple sentences or passages that you’d like to discuss. If everyone is prepared it will be easier for you to participate actively and comfortably in class, which will affect your participation grade. Read the assigned readings very carefully and aim for a good conceptual and practical understanding.

3. Class Participation: Discussions will take place throughout the semester and will form your class participation grade. Class participation includes sharing your reactions to the readings and discussion prompts, asking questions, and formulating concerns or reflecting on issues that you find important given your own identity. Regardless of what professional role(s) you
adopt in the future, it will be important for you to communicate your ideas and knowledge (and confusions) to others. Participation is a skill set that you can learn and develop, whether you come by it naturally or not. In this course we all share the responsibility for making discussions and exercises useful. Although grading class participation is subjective, it is not arbitrary. Please refer to the grading rubric (posted on Brightspace) to examine the kinds of things I will be considering when assigning participation grades. Note: Discussion posts may be graded automatically by Brightspace or en masse and then adjusted manually by the instructor according to the grading rubric. Thus, an initial grade may be different from (i.e., higher than) the adjusted, final grade.

4. **Module Quizzes**: Quizzes will take place at the end of each corresponding module. Each quiz will be worth 20 points (10 items per quiz * 2 points per item) and will be comprised of material from weekly readings and modules. You will have an opportunity to complete each module quiz twice, with the highest score counting toward your grade. You will be given 10 minutes per attempt (with a 1-minute grace period), after which the quiz will lock and no further progress can be made. Quizzes must be completed before the end date and time of the associated module; **there is no opportunity to make up a missed quiz without approved documentation** (see “Course Rules” below). Remember that there are many points to be earned in the course, and missing a single quiz is unlikely to drastically affect your grade. Each quiz appears at the end of the module, so be sure to leave enough time to review the content and take the quiz before the module closes.

5. **Final Exam**: There will be a cumulative final exam that will assess your comprehensive knowledge of content from the course. The exam is worth 200 points (100 items * 2 points per item), will consist primarily of multiple-choice and true/false questions, and will be based on material from the weekly readings and modules. The final exam must be taken during the scheduled class period. Information on missed exams can be found under “Course Rules.”

6. **Research Proposal**: You will write an individual research proposal that could be carried out during a semester-long research seminar class (e.g., PSYC 4397). The purpose of the proposal is to give you practice developing a hypothesis, designing an experiment, outlining your data analysis plan, and presenting your anticipated results. The proposal must be written in APA style and follow standard APA formatting rules. Specific instructions for the research proposal will be provided on Brightspace.

7. **Extra Credit**: You will start the class with 3 extra credit points. Each time you e-mail me (or the TA) with a question that can be found and answered in the syllabus, you will lose points. This is intended to cut down on the number of e-mails I receive in which students ask questions I have already answered here. You can lose up to but no more than all 3 extra credit points. **You should feel free to ask questions if you have them.** However, my time is a valuable resource, and the more time I spend re-answering questions, the less time I can devote to assisting students outside class, responding to discussion posts, etc. If you have questions, please ask—just be sure to check the syllabus first!
GRADING POLICY

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<table>
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<tbody>
<tr>
<td>Class Participation</td>
<td>50</td>
</tr>
<tr>
<td>Module Quizzes</td>
<td>200</td>
</tr>
<tr>
<td>Cumulative Final Exam</td>
<td>200</td>
</tr>
<tr>
<td>Research Proposal</td>
<td>150</td>
</tr>
</tbody>
</table>

Your grade (as a percentage) = \( \frac{\text{All Assignments} + \text{Extra Credit}}{600} \)

Except in cases in which your final grade has been calculated in error, do not e-mail me asking me to change your final grade or to provide you with opportunities for additional work to raise your grade. You receive the grade you ultimately earn. Standard rounding rules apply (.5 and above). If you have questions about how to calculate your final grade, e-mail me through Brightspace.

DOING WELL IN THIS COURSE

Doing well in this course requires hard work, patience, and self-discipline. I strongly suggest you spend time each day reviewing and practicing this material. Cramming is ineffective because it exposes you to information at a shallow, superficial level. Research in cognitive psychology shows that deep processing—processing information in a meaningful way and linking concepts to previous knowledge—increases learning (Chew, 2008). Learning this material will be difficult if you cram and process it at a shallow level. To steadily reinforce your knowledge, you should read the readings closely, connect concepts in meaningful ways (either to class examples or to your own life), and space out your studying. Allow yourself enough time for this process (i.e., don’t begin studying for a quiz the day of the quiz!). If you are having difficulty understanding a concept, try not to get frustrated or defensive. Relax, take a deep breath, and be persistent. If you put in the work, you will likely reward yourself with a good grade and foundational knowledge of research design.

COURSE RULES

E-mail/Course Website: E-mail is the best way to contact me. Send e-mails through the course Brightspace website. In case of an emergency, please send e-mails to conlonke@sfasu.edu and include “Research Design, Section 002” in the subject line.

I will post announcements and send e-mails periodically with announcements about the class. It is imperative that you check your Brightspace course website and e-mail account regularly. I will post class materials on Brightspace; I advise you to check it at least once a day. If you are unfamiliar with Brightspace or are having difficulty accessing Brightspace, please contact the SFA Help Desk immediately at https://help.sfasu.edu/TDClient/2027/Portal/Home/ or call (936) 468-4357.

Late/Missed Assignments: All work must be submitted via Brightspace by the due date and time indicated in the syllabus, on Brightspace, and/or as announced in class. When submitting an assignment to the Brightspace course dropbox, it is your responsibility to upload the correct.
uncorrupted file. If I cannot open the file you submitted to Brightspace or you submit the wrong file, a late penalty may be assessed, or you may not receive credit at all. If you turn in assignments late, you run the risk of not getting feedback in addition to losing points.

**Missed Quizzes/Exam(s):** Do not miss a quiz or an exam unless it is unavoidable and for a legitimate reason (e.g., observance of religious holidays, documented medical excuses, or other documented crises). If you must miss a quiz or exam, inform me as far in advance as possible or, if it is not possible to tell me in advance (e.g., last-minute illness or medical emergency), contact me as soon as you can after the quiz/exam. I may ask for documentation that I can keep for my records to show that your missing the quiz/exam was for a legitimate reason, but contact me in any case whether the reason for missing was legitimate or not. I reserve the right to determine what constitutes a valid and acceptable excuse.

I provide make-up quizzes and exams only to students who can document their reason(s) for missing a quiz/exam. This policy applies to all students, regardless of circumstance, and ensures that make-up quizzes/exams are given in a fair and consistent manner. If allowed to make up a quiz/exam, you will be expected to do so as soon as possible. In most cases this will be no later than during my next office hour following the day of the quiz/exam, but absolutely no later than one week following the original due date (except in extreme circumstances). This is to ensure that you do not fall too far “behind” in the course. If allowed a make-up exam, you will be given a different version from what is given during the regular exam period.

The Dean of Students Office has formalized a process for student absences for specified reasons, in particular, death of a family member, admission to a hospital, personal emergency (e.g., car accident, drastic life event such as a fire), or administrative and other (jury duty, court subpoena, etc.). In these circumstances, please follow the process for submitting a faculty notification request with the Dean of Students Office: [https://www.sfasu.edu/thehub/sos/notification-request](https://www.sfasu.edu/thehub/sos/notification-request)

If you need to reschedule an exam due to travel, you must provide documentation that travel plans were arranged before the start of the semester (January 18, 2024) and notify me of your travel plans by January 25, 2024. Do not schedule personal travel during the final week of the semester and hope or expect that I will reschedule your exam around your travel plans; I will not. Make-up final exams may not be an option due to scheduling issues and/or the immediacy of the grade deadline.

**Institutional Absences (HOP 04-110):** An Institutional Absence may be granted to a student who participates as a representative of the University in academic (including research), extra- or cocurricular, or athletic events. Students will be excused for institutional purposes from otherwise required academic activity only when a valid Institutional Absence is approved by the appropriate administrative unit or official and the documentation of approval is provided to the faculty member at least five (5) days in advance.

Institutional absences will not be approved for keystone events, defined as: a special or unique assignment, test, project, experience, or other academic exercise identified by the Faculty member as critical for successful completion of standards of the class and unable to be missed. These events
must be identified on the syllabus at the beginning of the semester and communicated to the students. Events added to the syllabus at a later date will not qualify for Keystone Event status. Keystone events where the date/time is changed will no longer be considered a keystone event. Students should make themselves aware of any keystone events identified in the syllabus to ensure there are no conflicts.

For keystone events where the assignment dates vary, it is incumbent upon the students to work with their faculty member to not select a conflicting date.

More information on Institutional Absences, including how to apply, can be found at https://www.sfasu.edu/deanofstudents/student-resources/institutional-absences.

**Classroom Etiquette:** I expect students to act civilly at all times. This means respecting yourself, other students, and me. Uncivil behavior will not be tolerated. Examples of uncivil behavior include, but are not limited to, disrespectful communication (i.e., rude or aggressive tone in discussion posts or e-mail), using the course website and materials for non-class related purposes, tardiness to Zoom meetings, talking while another student is talking or while I am lecturing during Zoom meetings, or breaking the Code of Student Conduct and Academic Integrity. Students engaging in uncivil or disruptive behavior may be removed from the class. Audio/video recordings without my permission are not allowed. Students who do not attend class regularly or who perform poorly on coursework may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

**Artificial Intelligence (AI):** The use of an AI tool (e.g., ChatGPT, Google Bard) to create and submit non-original work in this class is not authorized and may constitute a violation of the Code of Student Conduct and Academic Integrity. All work created for and submitted in this class, written or otherwise, should represent your own original work.

**Responsibility Statement and Disclaimer:** You are responsible for all information presented in this syllabus and for course-related information in announcements or messages provided throughout the semester during class meetings (even if you miss that class), on the course Brightspace page, and/or via e-mail. It is also your responsibility to secure the appropriate technological means (i.e., a reliable computer and stable internet connection) to complete this course. I am not responsible for, nor will I be expected to accommodate missed, late, or incomplete work as a result of technological issues you experience. Please ensure that you possess the technological capability to complete this course. If you disagree with the course rules described in this syllabus, you should drop the course. By remaining in this course, you acknowledge and accept the policies as stated herein and accept the policies as stated or amended during the course of the semester.

**Copyright Statement:** Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act.
Statement of Usage: Some of the materials and information provided in this course represent the instructor’s intellectual property and are shared with you for instructional purposes only. Any attempt to use, reuse, amend, share, sell, profit from, or distribute the information provided in this course for any purpose is strictly prohibited and may be prosecuted under applicable policies or laws. By enrolling in this course, you agree to uphold the integrity of the course materials and assignments by agreeing not to screen-capture, take pictures, or (electronically) copy and/or share quiz/test items with others or on the internet. Further, you agree not to share, alter, or distort any original audio or video recordings by the instructor for any purpose. Any violation of this policy may result in disciplinary action including, but not limited to, failing individual assignments and/or the course.

As a courtesy, Zoom-recorded (lecture) videos automatically produce audio transcripts (Otter.ai™) that attempt to capture and translate the speaker’s exact words into readable text. However, because this text is translated by non-human AI, discrepancies may exist between what is said and what the audio transcription service records as being said. Except in certain circumstances, Dr. Conlon has not corrected and/or aligned the wording between the lecture videos and the transcribed recordings. Thus, any discrepancies, especially those that deviate from professional or conversational decorum, are unintentional and coincidental. Dr. Conlon is not responsible for any transcription errors or misinterpretations by the user.

Academic Integrity: The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.
Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

**Final Course Grade Appeals:** Please contact me if you have any questions about your grade or the conduct of this course. If you wish to formally dispute a final course grade, please refer to the relevant policy: [https://www.sfasu.edu/docs/policies/6.3.pdf](https://www.sfasu.edu/docs/policies/6.3.pdf)

**Withheld Grades Semester Grades Policy:** Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to [https://www.sfasu.edu/policies/course-grades-5.5.pdf](https://www.sfasu.edu/policies/course-grades-5.5.pdf).

**Students with Disabilities:** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Student Wellness and Well-Being:** SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**

**The Dean of Students Office** (Rusk Building, 3rd floor lobby)
[www.sfasu.edu/deanofstudents](http://www.sfasu.edu/deanofstudents)
(936) 468-7249
dos@sfasu.edu

**SFA Human Services Counseling Clinic** (Human Services, Room 202)
[www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)
(936) 468-1041

**The Health and Wellness Hub** (“The Hub”; Location: corner of E. College and Raguet St.)
To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:

- Health Services
- Counseling Services
- Student Outreach and Support
- Food Pantry
- Wellness Coaching
- Alcohol and Other Drug Education

www.sfasu.edu/thehub
(936) 468-4008
thehub@sfasu.edu

Crisis Resources:
- Burke 24-hour crisis line: 1.800.392.8343
- National Suicide Crisis Prevention: 9-8-8
- Suicide Prevention Lifeline: 1.800.273.TALK (8255)
- johCrisis Text Line: Text HELLO to 741-741

SYLLABUS CHANGES

This syllabus is a guide for the course and is subject to change with advance notice. I reserve the right to make changes to the syllabus, course schedule, and readings as necessary. I will announce any changes in class and on Brightspace.
# COURSE SCHEDULE

This schedule is intended as a course guide and is subject to change with advance notice if required by circumstances occurring during the semester. (Changes will be announced in class and on Brightspace.) Scheduled exams and submission deadlines reflect SFA’s local time zone.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Module</th>
<th>*<em>ZOOM MEETINGS</em>, DISCUSSIONS, AND ASSIGNMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>January 18-20, 2024</td>
<td>Getting Started</td>
<td>• <em>Introduce Yourself</em></td>
</tr>
<tr>
<td>Week 2</td>
<td>January 21-27</td>
<td>Module 1: Thinking Like a Researcher</td>
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<tr>
<td>Week 3</td>
<td>January 28-February 3</td>
<td>Module 2: The Research Process</td>
<td>• Zoom Meeting (Monday, January 29, 1:00-1:50pm)</td>
</tr>
<tr>
<td>Week 4</td>
<td>February 4-10</td>
<td>Module 3: Ethics</td>
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</tr>
<tr>
<td>Week 5</td>
<td>February 11-17</td>
<td>Module 4: The Psychologist’s Toolbox</td>
<td>• Zoom Meeting (Monday, February 12, 1:00-1:50pm)</td>
</tr>
<tr>
<td>Week 6</td>
<td>February 18-24</td>
<td>Module 5: Observational Research</td>
<td>• <em>Discussion Topic/Post</em></td>
</tr>
<tr>
<td>Week 7</td>
<td>February 25-March 2</td>
<td>Module 6: Survey Design and Scale Construction</td>
<td>• Zoom Meeting (Monday, February 26, 1:00-1:50pm)</td>
</tr>
<tr>
<td>Week 8</td>
<td>March 3-8</td>
<td>Module 7: Two-Group Design</td>
<td>• Research Proposal Introduction Draft</td>
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<td></td>
<td>March 9-17</td>
<td><em>Spring Break – No Class!</em></td>
<td></td>
</tr>
<tr>
<td>Week 9</td>
<td>March 18-23</td>
<td>Module 7: Two-Group Design (cont’d)</td>
<td>• Zoom Meeting (Monday, March 18, 1:00-1:50pm)</td>
</tr>
<tr>
<td>Weeks 10-11</td>
<td>March 24-April 6 (March 28-31: Easter Break – No Class!)</td>
<td>Module 8: Multigroup Design</td>
<td>• Zoom Meeting (Monday, April 1, 1:00-1:50pm)</td>
</tr>
<tr>
<td>Weeks 12-13</td>
<td>April 7-20</td>
<td>Module 9: Factorial Design</td>
<td>• Discussion Topic/Post</td>
</tr>
<tr>
<td>Week 14</td>
<td>April 21-27</td>
<td>Module 10: Within-Subjects Design</td>
<td>• Research Proposal Results/Discussion Draft</td>
</tr>
<tr>
<td>Week 15</td>
<td>April 28-May 4</td>
<td></td>
<td>• <em>Discussion Topic/Post</em></td>
</tr>
</tbody>
</table>

• Zoom Meeting (Monday, April 29, 1:00-1:50pm)
*There is no in-person or face-to-face instruction in this course;* instead, the course is a hybrid of online (primarily) and livestream instruction. Synchronous Zoom meetings have been scheduled in lieu of some originally scheduled face-to-face class and lab sessions. In other words, the livestream aspect of the course involves meeting via Zoom on select days (see above) as we would have had the course proceeded in person. Zoom meetings may involve activities, discussions, group work, Q & A, etc. Attendance, though not required, is strongly encouraged. Topics discussed during Zoom meetings may appear on assessments such as quizzes and the final exam. If you are unable to attend a scheduled meeting, it is **YOUR** responsibility to contact a classmate to find out what you missed. If you miss a Zoom meeting, **DO NOT** e-mail me and ask me for notes or for me to “catch you up” on missed material. Additional Zoom meetings may be added to the course calendar as needed.

**COURSE CREDIT HOUR JUSTIFICATION STATEMENT**

PSYC 3341 “Research Design” (3 credits) is a writing-intensive course which is designed to introduce students to research design in psychology by covering the application of research methods emphasizing use of experimental control and analysis of data for reporting experimental results in the psychological study of human and non-human behavior. The course typically meets 150 minutes a week in two 75-minute segments or three 50-minute segments for 15 weeks, and also meets for a 2-hour final examination period. The course lab typically meets an additional 75 minutes a week in one time segment in which students learn how to design experiments and write in APA style culminating in the development of an original empirical research paper. Students typically have significant weekly reading assignments, writing assignments, are expected to take regular tests, and a final examination. These activities average at a minimum 8 hours of work each week to prepare outside of classroom hours. Online course sections contain extensive written content that includes the same information students in a face-to-face lecture sections receive, requiring students to engage the online modules for at least four hours per week. For every hour a student spends engaging with the online content, he/she spends at least two hours completing associated activities and assessments.