Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.
COURSE SYLLABUS

EXSC 525
RESEARCH METHODS IN EXERCISE SCIENCE

COURSE DESCRIPTION
In this course students will be given the opportunity to develop their knowledge of the applied theories behind exercise science research methods. An emphasis will be placed on study design and approval, manuscript format and preparation, application of statistical analysis and data evaluation.

RATIONALE
The purpose of this course is to enhance the student’s knowledge of research methods in exercise science and human performance. This course is designed to introduce the student to the various aspects that comprise the exercise science research process that includes: literature reviews, problem solving, methods development, ethical issues in research, elementary statistical procedures, etc. The student is afforded the opportunity to acquire the skills necessary to synthesize and critique exercise science literature as well as successfully write a research paper or present a research project.

I. PREREQUISITE
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Communicate effectively concerning current topics in exercise science literature.
B. Demonstrate an understanding of the differences and applicability of various methods of experimental design.
C. Evaluate the quality of research design examples.
D. Propose an original research study.
E. Compose a manuscript based on an original study design.
F. Apply the correct statistical analysis technique to specific study design scenarios.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist

After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (3)

Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum. Each thread must be at least 350 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 2 other classmates’ threads. Each reply must be at least 200 words. Each thread and reply must contain at least 1 citation in current APA format.

D. Abstract Creation

The student will need to read (several times over) the assigned journal article and then create an abstract for the article. The student must be very familiar with the contents of the instructor-chosen article in order to write an adequate and sufficient abstract. This assignment must be 250–350 words and be in current APA format.

E. Manuscript Assignment

The student will write a 7–12-page research-based paper in current APA format that focuses on the provided methods and results section from an instructor-selected published research journal article. The student must write the abstract, introduction section, discussion section, and conclusion based on the provided methods and results sections. In addition to the required 7–12-page research-based paper, the paper must include a reference section with at least 10 references. The student must use course content from previous modules/weeks in order to earn a successful grade.

F. Quizzes (3)

Each quiz will cover the Reading & Study material for the assigned modules/weeks. Each quiz will be open-book/open-notes, contain 20 multiple-choice and 2 essay questions, and have a 1-hour and 10-minute time limit.

VI. COURSE GRADING AND POLICIES

A. Points

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (3 at 100 pts ea)</td>
<td>300</td>
</tr>
</tbody>
</table>
Abstract Creation 100
Manuscript Assignment 300
Quizzes (3 at 100 pts ea) 300

Total 1010

B. Scale
D- = 680–699   F = 0–679

C. Late Assignment Policy
If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.
Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the course will not be accepted.
4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance
Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.
# COURSE SCHEDULE

**EXSC 525**


<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baumgartner &amp; Hensley: chs. 1–2 4 presentations</td>
<td>Course Requirements Checklist Class Introductions Quiz 1</td>
<td>10 0 100</td>
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<tr>
<td>2</td>
<td>Baumgartner &amp; Hensley: chs. 3–6 5 presentations</td>
<td>Quiz 2</td>
<td>100</td>
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<tr>
<td>3</td>
<td>Baumgartner &amp; Hensley: chs. 7, 16–17 3 presentations</td>
<td>Quiz 3</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Baumgartner &amp; Hensley: chs. 8–10 4 presentations</td>
<td>Abstract Creation</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Baumgartner &amp; Hensley: ch. 14 3 presentations</td>
<td>DB Forum 1</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Baumgartner &amp; Hensley: ch. 13 3 presentations</td>
<td>DB Forum 2</td>
<td>100</td>
</tr>
<tr>
<td>7</td>
<td>Baumgartner &amp; Hensley: ch. 15 2 presentations</td>
<td>Manuscript Assignment</td>
<td>300</td>
</tr>
<tr>
<td>8</td>
<td>Baumgartner &amp; Hensley: ch. 12 2 presentations</td>
<td>DB Forum 3</td>
<td>100</td>
</tr>
</tbody>
</table>

**TOTAL** | **1010**

DB = Discussion Board

**NOTE:** Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on Friday.