Eastern Illinois University  
New Course Proposal  
KSS 4500, Research and Statistics in Kinesiology & Sports Studies

Please check one:  
☐ New course  ☐ Revised course

PART I: CATALOG DESCRIPTION

1. Course Prefix and Number:  KSS 4500
2. Title (may not exceed 30 characters, including spaces):  Research and Stats in KSS
3. Long title, if any (may not exceed 100 characters, including spaces):  Research and Statistics in Kinesiology and Sports Studies
4. Class hours per week, lab hours per week, and credit [e.g., (3-0-3)]:  (3-0-3)
5. Term(s) to be offered:  ☒ Fall  ☒ Spring  ☐ Summer  ☐ On demand
6. Initial term of offering:  ☒ Fall  ☐ Spring  ☐ Summer  Year:  2012
7. Course description (not to exceed four lines):  This course provides majors within the Department of Kinesiology and Sports Studies an introduction to the practical aspects of research and statistics in but not limited to: athletic training, physical education, exercise science and sport management.

8. Registration restrictions:
   a. There are no equivalent courses.
   b. Prerequisites:  KSS 3900 or permission of the Department Chair
   c. Who can waive the prerequisite(s)?
      ☐ No one  ☒ Chair  ☐ Instructor  ☐ Advisor  ☐ Other (Please specify)
   d. Co-requisites:  none
   e. Repeat status:  ☒ Course may not be repeated.
      ☐ Course may be repeated to a maximum of _ hours or _ time.
   f. Degree, college, major(s), level, or class to which registration in the course is restricted, if any:
      This course contains advanced content and it is only intended for students currently majoring in the Department of Kinesiology and Sports Studies.
   g. Degree, college, major(s), level, or class to be excluded from the course, if any:
      Any student is excluded who is not currently a major within the Department of Kinesiology and Sports Studies.

9. There are no special course attributes.
10. **Grading methods** (check all that apply): ☒ Standard letter ☐ C/NC ☐ Audit ☐ ABC/NC (“Standard letter”—i.e., ABCDF—is assumed to be the default grading method unless the course description indicates otherwise.)

11. **Instructional delivery method:** ☒ lecture ☐ lab ☐ lecture/lab combined ☐ independent study/research ☐ internship ☐ performance ☐ practicum or clinical ☐ study abroad ☐ other

**PART II: ASSURANCE OF STUDENT LEARNING**

1. List the student learning objectives of this course:

   At the end of the course, the Athletic Training and Kinesiology and Sports Studies students will be able to discuss and/or demonstrate as it relates to their future professions:
   
   a. An understanding of the purpose and need for research.
   b. An understanding of the scientific method.
   c. An understanding of the various types of research including but not limited to: quantitative, qualitative, experimental, descriptive, and historical.
   d. An understanding of various concepts of research including but not limited to: data collection research, literature research, basic versus applied research and research in daily life.
   e. An understanding of common statistical terminology.
   f. An understanding of the meaning and applicability of statistical significance.
   g. An understanding of various sampling techniques.
   h. The ability to utilize common software applications to manipulate data.
   i. The ability to evaluate and critique current research articles including methods and statistical analysis.

2. Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Written Exams</th>
<th>Research Article Analysis</th>
<th>Final Exam</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discuss and demonstrate an understanding for the purpose and need for research.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Discuss and demonstrate an understanding for the scientific method.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Discuss and demonstrate an understanding of the various types of research including but not limited to: quantitative, qualitative, experimental, descriptive, and historical.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Objective</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Discuss and demonstrate an understanding of various concepts of research including but not limited to: data collection research, literature research, basic versus applied research and research in daily life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss and demonstrate an understanding of common statistical terminology.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Discuss and demonstrate an understanding of the meaning and applicability of statistical significance.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Discuss and demonstrate an understanding of various sampling techniques.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate the ability to utilize common software applications to manipulate data.</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Demonstrate the ability to evaluate and critique current research articles including methods and statistical analysis.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

3. **Explain how the instructor will determine students’ grades for the course:**

   - **Written Exams** – 40%  
     - 100%-90% = A
   - **Research Article Analysis** – 15%  
     - 89.9%-80% = B
   - **Final Exam** – 25%  
     - 79.9%-70% = C
   - **Projects** – 20%  
     - 69.9%-60% = D
     - 59.9% & below = F

4. **This is not a technology or other nontraditional-delivered course.**

5. **This is not a graduate level course.**

6. **If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *)**  
   - **Writing-active** – Research articles and projects.
PART III: OUTLINE OF THE COURSE

This course will meet for three 50 minute lectures per week for 15 weeks.

<table>
<thead>
<tr>
<th>Week</th>
<th>Classroom Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to research methods in Kinesiology &amp; Sports Studies related fields</td>
</tr>
<tr>
<td>2</td>
<td>Purpose &amp; need for research in the various fields associated with Kinesiology &amp; Sports Studies</td>
</tr>
<tr>
<td>3</td>
<td>Concepts of Research (data collection, literature review, basic v. applied)</td>
</tr>
<tr>
<td>4</td>
<td>The Scientific Method</td>
</tr>
<tr>
<td>5</td>
<td>Ethics in Research</td>
</tr>
<tr>
<td>6</td>
<td>Variables in Research</td>
</tr>
<tr>
<td>7</td>
<td>Types of research utilized in Kinesiology &amp; Sports Studies related fields</td>
</tr>
<tr>
<td>8</td>
<td>Reading research articles in the field of Kinesiology &amp; Sports Studies</td>
</tr>
<tr>
<td>9</td>
<td>Introduction to statistics commonly found in the field of Kinesiology &amp; Sports Studies</td>
</tr>
<tr>
<td>10</td>
<td>Basic Statistical Terminology</td>
</tr>
<tr>
<td>11</td>
<td>Validity &amp; Reliability</td>
</tr>
<tr>
<td>12</td>
<td>Statistical Significance</td>
</tr>
<tr>
<td>13</td>
<td>Analyzing Research Articles in the field of Kinesiology &amp; Sports Studies</td>
</tr>
<tr>
<td>14</td>
<td>Statistical Sampling Methods and Surveys frequently utilized in Kinesiology &amp; Sports Studies</td>
</tr>
<tr>
<td>15</td>
<td>Software Applications commonly utilized in Kinesiology &amp; Sports Studies</td>
</tr>
</tbody>
</table>

PART IV: PURPOSE AND NEED

1. Department Rationale:

The purpose of this course proposal is to provide undergraduate students in the Department of Kinesiology and Sports Studies an introduction to research and statistics as it applies to their future professions in athletic training, physical education, exercise science and sport management.

2. Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.

This course contains advanced content that is intended only for students who are currently a junior or senior status. This course provides the base knowledge necessary for the more advanced content seen at the graduate level in research and statistics.

3. If the course is similar to an existing course or courses, justify its development and offering.

Although there are multiple statistics courses on campus, the focus of this course is kinesiology and sports studies-specific, and therefore not similar to other courses on campus. This course will allow for the undergraduate student in Kinesiology and Sports Studies the opportunity to gain knowledge about the practical aspects of research and statistics and to provide a foundation for further expansion in a graduate level research methods and statistics course.
4. Impact on Program(s):

   a. This is a required course for students in the Athletic Training Education Program and will provide an opportunity for other students within the Department of Kinesiology and Sports Studies to develop a base knowledge of research and statistics prior to the pursuit of a graduate degree.

PART V: IMPLEMENTATION

1. Faculty member(s) to whom the course may be assigned: Brent Walker, Phyllis Croisant, Brian Pritschet, or any qualified faculty member in the Department of Kinesiology and Sports Studies.

2. Additional costs to students: No additional costs necessary at this time.

3. Text and supplementary materials to be used (Include publication dates):


PART VI: COMMUNITY COLLEGE TRANSFER

A community college course will not be judged equivalent to this course.

PART VII: APPROVALS

Date approved by the department or school: October 17, 2008

Date approved by the college curriculum committee: November 10, 2008

Date approved by the Honors Council (if this is an honors course): Not applicable

Date approved by CAA: December 11, 2008