A. COURSE NUMBER AND NAME:
MSN 6120: Research Statistics

B. CREDIT HOURS: Three (3) credit hours. Three (3) contact hours per week.

C. COURSE DESCRIPTION:
This course focuses on the development of research skills used to evaluate data in support of the utilization of findings in clinical practice. Skills related to statistical analysis of quantitative data will be emphasized. Parametric and non-parametric methods of statistical analysis will be discussed.

D. COURSE OUTCOMES:
Upon successful completion of the course, the student will be able to:

1. Examine the basic concepts underlying quantitative statistical tests.
2. Interpret basic statistical measurements.
3. Apply statistical knowledge to determine if the use of a specific statistic is appropriate for a research design.
4. Assess statistical results to evaluate outcomes and to support best practice.
5. Calculate basic statistics using SPSS software.
6. Interpret SPSS output.

E. COURSE CONCEPTS:
Research, Informatics

F. TEACHING STRATEGIES:
- Audio/visual materials
- Homework exercises
- Instructor led practice
- Critical thinking exercises

G. METHODS OF EVALUATION:
- Quizzes
- Selected readings
- Critical thinking exercises
- Workbook exercises
- SPSS exercises
Grading Scale:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100-95%</td>
<td>A</td>
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<tr>
<td>94.90%</td>
<td>A-</td>
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<tr>
<td>90-89.5%</td>
<td>B</td>
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<tr>
<td>86.83%-89.5%</td>
<td>B-</td>
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<tr>
<td>82-86.83%</td>
<td>C</td>
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<tr>
<td>72-82%</td>
<td>C-</td>
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<tr>
<td>66-72%</td>
<td>D</td>
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<tr>
<td>62-66%</td>
<td>D-</td>
</tr>
<tr>
<td>59% and below</td>
<td>E</td>
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Students must have an 80% (B-) average in this course to pass the course and continue in the nursing program. (Refer to Nursing Department Student Handbook).

- **Rounding** – Any grade below an 80% (79.5) will not be rounded.

All other grades will be rounded at 0.5 (i.e. 94.5 can be rounded to an A).

- **Evaluation Incentive** – Each semester course and faculty evaluations will be available online in Chi Tester. Students who complete both course and faculty evaluations will receive a 1% completion incentive that will be added to their final grade. Any student who is at a failing grade during this time will not be allowed the 1% evaluation incentive.

H. **REQUIRED TEXTS:**


Software: Homework exercises will be completed in part by using the *Statistical Package for the Social Sciences (SPSS®)* Version 20. This software is available through the WSU Virtual Lab or can be purchased.

I. **RECOMMENDED TEXTS:**

None

J. **COURSE FORMAT:** There are 9 units in this course and each is scheduled to be covered during one to two weeks of the semester.

Unit A-Introduction to Statistics
Unit B-Frequency Distributions: Tabulating and Displaying Data
Unit C-Central Tendency, Variability, and the Normal Distribution
Unit D-Reliability, Validity, and Predictive Values
Unit E-Hypothesis Testing, Sample Size, Effect Size, and Power
Unit F-Chi Square Tests
Unit G-Student t-test (2 weeks)
Unit H-Analysis of Variance (2 weeks)
Unit I- Correlation Coefficients
Unit J- Regression Analysis
Unit K-Relative Risk, Odds Ratios, and Attributable Risk (2 weeks)

K. PROFESSIONAL CONDUCT: 
Students are expected to abide by the WSU student code and the Nurse Practice Act of the State of Utah. Plagiarism or any other form of cheating will result in failure of the course and probable dismissal from the BSN program. WSU subscribes to Turnitin.com, an electronic service that verifies the originality of student work. Enrollment in this course may require you to submit some or all of your assignments to it this semester, and documents submitted to TurnItIn.com are retained anonymously, in their databases. Continued enrollment in this course constitutes an understanding of an agreement with this policy.

L. SYLLABUS DISCLOSURE STATEMENT: 
The syllabus is the governing document for this course. Your decision to take this course amounts to your tacit consent to the conditions of this syllabus. The professor, as well, is bound by the terms of this syllabus and may not make any significant changes, unless the class as a whole approves them.

M. SERVICES FOR STUDENTS WITH DISABILITIES: 
Services for Students with Disabilities: Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center (or Room 256, Bldg 2 at the Davis Campus). SSD can also arrange to provide course materials (including this syllabus) in alternative format upon request. Contact SSD by phone at 801-626-6413 (Ogden Campus) or 801-395-3442 (Davis Campus); or by e-mail at ssd@weber.edu.