



NSG 311 section 1 Syllabus

Statistics for Evidence Based Practice in the Health Sciences

Course Information

Course Information:

Statistics for Evidence Based Practice in the Health Sciences

NSG 311 1 (3.0 Credits)

Description

This online course is an introduction to the biostatistical concepts and the skills necessary to interpret data for Evidence-Based Practice (EBP) in the Health Sciences. Topics include an introduction to EBP, variation and variables, levels of data measurement, descriptive statistics and data display, probability, statistical and clinical significance, confidence intervals, statistical power analysis, hypothesis testing, and inferential statistics. Statistical techniques introduced are correlation, chi-square, t-test, odds ratios, relative risk, linear regression and an introduction to one-way analysis of variance. Open to nonmatriculated students.

Prerequisite(s): None

Delivery Mode

Correspondence

Department: SON Center for Lifelong Learning

College: School of Nursing

Meeting Days, Times and Locations,:

Course Learning Outcomes (CLO):

-  1. Describe concepts of evidence-based practice for the health sciences.
-  2. Identify levels of measurement for continuous and categorical variables.
-  3. Recognize common frequency distributions.
-  4. Summarize data in terms of central tendency and dispersion.
-  5. Interpret information on measures of relationships from graphic and narrative formats.
-  6. Interpret results of inferential statistical tests of group mean differences and for relationships between variables.
-  7. Interpret inferential statistical analyses in terms of hypothesis testing and confidence intervals.
-  8. Calculate odds ratio and relative risk ratio.
-  9. Interpret statistical analyses in published EBP research reports.
-  10. Differentiate between the statistical significance and the clinical significance of findings.
-  11. Interpret findings from inferential statistical tests including tests of goodness of fit, homogeneity, independence, correlation, regression and t-tests.

Assignments & Assessments

Teaching Methods/Activities:

This course uses a combination of methods to facilitate learning/mastery of content. You, the student, are in control of the pace. You can proceed through the learning modules as quickly or slowly as needed during the semester based on your learning style. The activities embedded within each learning module are designed to assist you with achieving

course objectives. They include:

- Textbook and evidence-based/research article review
- PowerPoint webcasts with printable slides aligned with each text chapter
- Web-based activities: interactive glossary, flash cards, matching exercises
- Article discussion questions and end of chapter review questions
- Course resources – websites and videos that have been helpful to students when learning concepts
- Videos – both YouTube videos and SON videos on various topics

Evaluation Measures/Learning Outcomes:

The Center for Lifelong Learning wants to make sure you have the time you need to do your best work in this course. It is your responsibility to reach out to course faculty to ask for more time if you need it, and to sign the contract that is sent to you and return it before the end of the semester. Failure to do so will result in zero points posted for any outstanding work and a final grade being calculated and posted.

Course Requirement	Percent of Total Grade	Alignment with Course Learning Outcome(s)
Online quizzes in Blackboard	90%	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 & 13
Yellowdig Discussion Board	10%	1

The final grade entered is based on School of Nursing grading system. See *Student Handbook page 22* (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)

Please note that the date and time for course opening and closing are in Eastern Standard Time (EST). Students will be held to this time zone for the completion of all course quizzes.

Grading System:

Undergraduate Grading*

A student must earn an overall course average of 73.00%. Grades will not be rounded up.

The following grading scale is used for the undergraduate programs:

Numeric Grade (Blackboard)	Letter Grade (URStudent/Transcript)	Grade Points (URStudent/Transcript)
93-100	A	4.0
90-92	A-	3.7

87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1
60-62	D-	.7
Below 60	E	0.0

ABSN only*: A student must earn at least an overall course and exam average of 73.00% exam average in a course and 73.00% overall average in the same course to pass the course. **Grades will not be rounded up.** *Detailed information about grading in ABSN courses can be found in Appendix J.*

Grades that carry no grade points and are not used to compute the cumulative point hour ratio are:

S	Satisfactory
P	Pass
WP	Withdraw passing
WE	Withdraw failing
I	Incomplete
N	No grade reported
AU	Audit

Required Textbook(s):

Heavey, E. (2022). *Statistics for nursing: A practical approach* (4th ed.). Jones & Bartlett

Learning. This textbook is required for class activities, readings, and to supplement the online lectures!

Permission has been granted from Jones & Bartlett Publishers to use instructor available materials and media tools in this online course that uses Heavey, *Statistics for nursing: A practical approach (4th ed.)*, as a required textbook.

Course Outline:

Module 1	Introduction to Statistics & Levels of Measurement
Module 2	Presenting Data
Module 3	Descriptive Statistics, Probability, & Measures of Central Tendency
Module 4	Measuring Data
Module 5	Sampling Methods
Module 6	Hypothesis Testing
Module 7	Power
Module 8	Chi Square
Module 9	Student t-Test
Module 10	ANOVA
Module 11	Correlations
Module 12	Regression Analysis
Module 13	Relative Risk, Odds Ratio, & Epidemiology
Module 14	Course Evaluation

Other Useful Information for Students:

Students are responsible for checking in UR Student to make sure their final grade is posted before ordering a transcript. If the student's final grade appears in UR Student, it will appear on their transcript.

Academic Policies

Academic Policies:



Disability Statement

If you have a disability for which you may be requesting an academic accommodation, you are encouraged to contact both your instructor and the access coordinator for your school to establish eligibility for academic accommodations.



Academic Honesty Statement

Students are responsible for their own work. Students are expected to have read and to practice principles of academic honesty. See [Student Handbook](#).

Student attestation is completed on Blackboard for each course.



Professional Behavior / Civility Statement

The University of Rochester, School of Nursing (SON) seeks to provide an environment for learning and teaching that is respectful of diverse persons and points of view in all classroom, electronic, and clinical settings. Consistent with this goal, it is expected that diverse perspectives and opinions will be expressed and received in a respectful and professional manner. Incivility, intolerance, hate speech, and abusive behaviors are considered professional misconduct and will be acted upon in accordance with the statement in the Student Handbook. (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)



Title IX/Sexual Harassment Policy

All members of the University community have the right to learn and work in a safe environment free from all forms of harassment, including harassment on the basis of sex or gender. Students who have been subjected to sexual harassment, including sexual assault, dating/domestic violence or stalking, have the right to receive academic, housing, transportation or other accommodations, to receive counseling and health services and to make a report about such behavior to the University and to law enforcement. For more information please visit www.rochester.edu/sexualmisconduct.



HIPAA Compliance

Students are to abide by the University of Rochester HIPAA Compliance Guidelines which can be found on the SON website (<http://son.rochester.edu/r/HIPAA-Video>).



ADA Statement

The University of Rochester welcomes students, faculty, staff and visitors with disabilities to our campus. We strive to meet the needs of all qualified participants in our programs and services by providing reasonable accommodations for individuals with disabilities and connection to resources within the University. Students seeking accommodations on the basis of a disability should follow the steps outlined on the [University's Disability Services website](#). The School of Nursing has designated an access coordinator to assist with implementing approved academic accommodations through an interactive process. Contact information for access coordinators can be found on the [Disability Services website](#).

See Student Handbook (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)



Holidays

See the [University of Rochester School of Nursing Handbook](#).



Refund Policy for Dropping a Course

All full-semester courses start the first day of the semester, regardless of when the first actual class session/meeting/zoom is held. After **7 calendar days** from the semester start date, the refund schedule takes effect and students will owe money if they are dropping the course. This policy pertains to all students, regardless of any tuition benefit or scholarship. For additional details about dropping or withdrawing from courses, please see the [UR SON Student Handbook](#)



Guidelines for the Use of Artificial Intelligence (AI)

Students at the School of Nursing must comply with faculty directions about using artificial intelligence (AI) and AI-generated text (such as ChatGPT, Duolingo, etc in student assessments, which may include encouragement to use AI, a prohibition from using AI, and various considerations between these two ends. If AI is allowed, students must cite its use (see <https://apastyle.apa.org/blog/how-to-cite-chatgpt>). In addition, students are responsible for verifying any citations provided by AI due to the known possibility of AI generating fictitious references. In all cases, students are encouraged to speak with course faculty about their intended use of AI. The risk of not adhering to these guidelines raises the risk of breaching academic and professional integrity guidelines as described in the [SON Student Handbook](#).



Safe Assign Disclosure

SafeAssign is a plagiarism prevention tool for students and instructors that may be used in your course. This tool is designed to compare your writing with other assignment submissions and published works and report any phrases or passages identical or similar to those in other assignment submissions and published works. If applicable, students are encouraged to submit their papers to a Draft SafeAssign assignment link in the course. If you have questions or are concerned about your report results, please reach out to the course faculty to discuss. Papers submitted to the Draft SafeAssign link will not count towards your grade, and students will not be penalized for any plagiarism detected in a draft. However, students are responsible for handing in final assignments that adhere to the School of Nursing Academic Honesty Policy.

Students are responsible for avoiding plagiarism and need to be attentive to writing in their voice and always cite and/or quote the ideas of others. SafeAssign will not detect all plagiarized content. Students are responsible for any plagiarized materials even if SafeAssign does not detect them.

Please see this guide (<https://help.blackboard.com/SafeAssign/Student>) and view [Assignments: Referencing, Plagiarism and Draft SafeAssign](#) for information on how to use SafeAssign and interpret the results.