

NSG 311 section 1 Syllabus

Statistics for Evidence Based Practice in the Health Sciences

Course Information

Course Information:

NSG 311 1 : Statistics for Evidence Based Practice in the Health Sciences

(3.0 Credits)



Fall Semester 2023



Center for Lifelong Learning



School of Nursing

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.

Pre-Requisite(s):

None

Co-Requisite(s):

None

Delivery Mode:



Online



Fast Track/Self Paced (Correspondence)














Hybrid

Meeting Days, Times and Locations,:

Fully online. No required in-class sessions.

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 Student 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:

A	93-100	C	73-76	
A-	90-92	C-	70-72	"C-" is considered unsatisfactory work for undergraduate students; see <i>Student Handbook</i> for implications.

B+	87-89	D+	67-69	
B	83-86	D	63-66	
B-	80-82	D-	60-62	
C+	77-79	E	<60	Failing grade; see <i>Student Handbook</i> for implications.

Final course grades will be converted to a letter grade. Final grades will not be rounded up; a minimum of 73.0% would be required to satisfactorily complete a course.

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

Effective Fall 2023:

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](#).

Fall 2020 - Summer 2023:

All full-semester courses start the first day of the semester/term date, regardless of when the first actual class session/meeting/zoom is held. After 10 business days from the semester/term date, the refund schedule takes effect and students will owe money if they are dropping the course; this is different from the past, so it is important to know it is NOT 10 days from the first actual class session/meeting/zoom the faculty have announced for the course. This holds true regardless of any tuition benefit or scholarship. For additional details about dropping or withdrawing from courses, please see the [UR SON Student Handbook](#).