FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Graduate Programs

Department Nursing

College Christine E. Lynn College of Nursing

UGPC Approval _____
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner _____
Catalog _____

***Current* Course Prefix and Number** NGR: 7845	***Current* Course Title** Applied Advanced Statistics

*Syllabus must be attached for **ANY** changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.*

Change title to:

Change prefix
From: **To:**

Change course number
From: **To:**

Change credits*
From: **To:**

Change grading
From: **To:**

Academic Service Learning (ASL) **
Add ☐ **Remove** ☐

* See Definition of a Credit Hour.
** Academic Service Learning statement must be indicated in syllabus and approval attached to this form.

Change description to:

Change prerequisites/minimum grades to:
Add: NGR 7846 as a prerequisite

DeleteNGR7815,DeleteNGR7818

Change corequisites to:

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade.

Terminate course? Effective Term/Year for Termination:

Effective Term/Year for Changes: FALL 2025

Faculty Contact/Email/Phone Howard K. Butcher, RN; PhD; FAAN /hbutcher@health.fau.edu/561-297-0095

Approved by	***Date***
Department Chair Howard K. Butcher	9-28-2024
College Curriculum Chair Rusa Mascaro	2/10/25
College Dean	2/10/25
UGPC Chair	
UGC Chair	
Graduate College Dean	
UFS President	
Provost	

Email this form and syllabus to UGPC@fau.edu 10 days before the UGPC meeting.

NGR7845 Catalog Description

Current Catalog Description

Applied Advanced Statistics (NGR 7845) 3 credits

Prerequisites: NGR 7815, NGR 7818

Focuses on advanced statistical concepts and research strategies for knowledge development in the discipline of nursing and the health sciences with an emphasis on longitudinal analyses.

Revised Catalog Description

Applied Advanced Statistics (NGR 7845) 3 credits

Prerequisites: NGR 7846; ~~NGR 7815l NGR7818~~

Focuses on advanced statistical concepts and research strategies for knowledge development in the discipline of nursing and the health sciences with an emphasis on longitudinal analysis.

FLORIDA ATLANTIC UNIVERSITY

NGR 7845-001 12751

Applied Advanced Statistics

Date: Thursday 6:00 PM - 9:00 PM

Building: C E Lynn Coll of Nursing Boca **Room:** 205

3 Credit(s)

Summer 2024 - 1 Full Term

Instructor Information

David Newman
Email: dnewma14@health.fau.edu
Office: Christine E College of Nursing, Room 215E
Office Hours: Immediately Following Class & By Appointment
Office Phone: (561) 297-2607

Cell Phone (330) 607-3799

Course Description

Applied Advanced Statistics
Prerequisites: NGR 7846; ~~NGR7815,~~
~~NGR 7818~~
Focuses on advanced statistical concepts and research strategies for knowledge development in the discipline of nursing and the health sciences with an emphasis on longitudinal analyses.

The course objectives are based on Simone Roaches (2002)1 attributes of caring. Upon completion of the course, the student will demonstrate evidence of:

Becoming Competent

1. Select appropriate innovative longitudinal methodologies used to develop evidence base for caring science.
2. Critically evaluate longitudinal research that employs innovative advanced statistical methods.

Becoming Compassionate

1. Design research that integrates patient uniqueness with appropriate longitudinal research methodologies and analyses or complex situations.

Demonstrating Comportment

1. Demonstrate caring behaviors in collaborative work on data-based projects.
2. Identify and describe interprofessional collaboration that will be required to accomplish research studies.
3. Analyze the components necessary for application of longitudinal research methods

Becoming Confident

1. Demonstrate essential methodological expertise required to conduct longitudinal research studies by identifying the most appropriate research design and statistical analyses under varying constants.

Attending to Conscience

1. Integrate protection of human subjects into innovative designs to advance nursing science.

1Roach, M.S. (2002). Caring, the human mode of being: A blueprint for the health professions. Ottawa, ONT: CHA Press. ISBN-10 1896151422.

Prerequisites/Corequisites

Prerequisite(s): All of the following:

- NGR 7815 Graduate / Undergraduate (Minimum Grade of C)
- NGR 7818 Graduate / Undergraduate (Minimum Grade of C)

Instructional Method

Mixed Online and Classroom
50%-79% of the course is delivered online. (Hybrid)

Required Texts/Materials

Publication Manual (OFFICIAL) 7th Edition of the American Psychological Association
ISBN: 9781433832185
Publisher: American Psychological Association
Edition: 7th

Publication Manual of APA
ISBN: 9781433832161
Publisher: American Psychological Association
Edition: 7th

Recommended Readings and Materials

Discovering statistics using IBM SPSS (5th ed.)
ISBN: 9781526436566
Authors: Andy Field
Publisher: Sage Publications
Publication Date: 2018
Edition: 5th

Presenting Your Findings
ISBN: 9781433807053
Authors: Adelheid A. M. Nicol, Penny M. Pexman
Publisher: Amer Psychological Assn
Publication Date: 2010-01-01

Bibliography

Bentler, P. M. & Bonett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. Psychological Bulletin, 88, 588–600.

Bickel, R. (2007). Multilevel analysis for applied research: It's on regression. New Your, N.Y.: The Guilford Press.

Burton, B. (1993). Some observations on the effect of centering on the results obtained from hierarchical linear modeling. Washington, DC: National Center for Education Statistics, U. S. Department of Education.

Byrne, B. M. (2010). Structural equation modeling with AMOS: basic concepts, applications, and programming. New York: Routledge.

Campbell, D.T. & Stanley, J. (1966). Experimental and quasi experimental designs for research. Boston, MA: Houghton Mifflin.

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. Structural equation modeling, 9(2), 233-255.

Clark, L. A., & Watson, D. (1995). Constructing validity: Basic issues in objective scale development. Psychological assessment, 7(3), 309.

Fraas, J. W., & Newman, I. (1994). A binomial test of model fit. Structural Equation Modeling, 1(3), 268; 268-273; 273.

Fox, R. J. (1983). Confirmatory factor analysis. John Wiley & Sons, Ltd.

Hair, J.F., Black, BW.C., Anderson, R.E. & Tatham, R.L. (2006). Multivariate data analysis (6th ed.) New Jersey: Prentice Hall. 418-419, 52-62.

Hayduk, L., Cummings, G. G., Boadu, K., Pazderka-Robinson, H., & Boulianne, S. (2007). Testing! Testing! One, two three – Testing the theory in structural equation models! Personality and Individual Differences, 42, 841–850.

Hoffman, D. A. & Gavin, M. B. (1998). Centering decisions in hierarchical linear models: Implications for research organizations. Journal of Management 24(5), 623-641.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. Electronic Journal of Business Research Methods, 6(1).

Hox, J. J. (1995). Applied multi-level analysis: A basic, non-technical introductory text. (2nd ed). Amsterdam, Netherlands: TT-Publikaties.

Hox, J.J. & Maas, C.J.M. (2001). The accuracy of multilevel structural equation modeling with pseudobalanced groups and small samples. Structural Equation Modeling, 8, 157-174.

Jöreskog, K. G. (1969). A general approach to confirmatory maximum likelihood factor analysis. Psychometrika, 34(2), 183-202.

Kenny, D.A. & McCoach, D.B. (2003), Effect of the number of variables of measures of fit in structural equation modeling. Structural Equation Modeling, 10(3), 333-351.

Kerlinger, F.N. (1986). Foundations of educational research. 3rd ed, New York, NY: Holt, Rinehart and Winston.

McCullagh, P., & Nelder, J. (1989). Generalized linear models. London: Chapman and Hall.

McCulloch, C., & Searle, S. (2001). Generalized, linear, and mixed models. NY: John Wiley & Sons.

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Singer, J., & Willett, J. (2003). Applied longitudinal data analysis: Modeling change and event occurrence. NY: Oxford University Press.

Stevens, J. P. (2009). Applied multivariate statistics for the social sciences (5th ed.). Hillsdale, NJ: Erlbaum. 292-294.

Schumacker, R. E., & Lomax, R. G. (2010). A beginner's guide to structural equation modeling. Psychology Press.

Schreiber, J. B., Nora, A., Stage, F. K., Barlow, E. A., & King, J. (2006). Reporting structural equation modeling and confirmatory factor analysis results: A review. The Journal of Educational Research, 99(6), 323-338.

Tabachnick, B.G. and Fidell, L.S. (2007), Using Multivariate Statistics (5th ed.). New York: Allyn and Bacon.

Tracz, S., Newman I., & Newman, D. (2014). Understanding HLM model and Type VI Error: The need for reflection. Multiple linear regression viewpoints, 40(1), 23-36.

Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. Personality and Individual Differences, 42(5), 893–898.

Vonesh, E. F. and Chinchilli, V. G. (1997). Linear and Nonlinear Models for the Analysis of Repeated Measurements. London: Chapman and Hall

Essential Literature On Caring Science (Revised 2017)

Barry, C. D., Gordon, S. C. & King, B. M. (2015). *Nursing Case Studies in Caring: Across the Practice Spectrum*. Springer. ISBN: 978-0-8261-7178-8

Boykin, A. & Schoenhofer, S. (2001). *Nursing as caring: A model for transforming practice*. Jones & Bartlett.

Boykin, A. & Schoenhofer, S. & Valentine, K. (2014). *Health care system transformation for nursing and health care leaders: Implementing a culture of caring*. Springer.

Buber, M. (1970). *I and thou*. Scribner.

Davidson, A., Ray, M. & Turkel, M. (Eds.). (2011). *Nursing, caring, and complexity science*. Springer.

Duffy, J.R. (2013). *Quality caring in nursing and health systems: Implications for clinicians, educators, and leaders*. Springer.

Locsin, R.C (2016). *Technological competency as caring in nursing: A model for practice (2nd ed.)*. Silliman University Press.

Mayeroff, M. (1971). *On caring*. HarperCollins.

McFarland, M.R. & Wehbe-Alamah, H. (2017). *Leininger's Culture Care diversity and universality: A worldwide theory of nursing (3rd Ed.)*. Jones & Bartlett.

Paterson, J. & Zderad, L.T. (1988). *Humanistic nursing*. National League for Nursing.

Ray, M.A. (2016). *Transcultural caring dynamics in nursing and health care (2nd ed.)*. FA Davis.

Roach, M.S. (1987). *The human act of caring: A blueprint for the health professions*. Canadian Hospital Association.

Rosa, W., Horton-Deutsch, S, & Watson, J. (2019). *A handbook for caring science: Expanding the paradigm*. Springer.

Smith, M.C., Turkel, M.C., & Wolf, Z.R. (2012). *Caring in nursing classics: An essential resource*. Springer.

Watson, J. (2009). *Assessing and measuring caring in nursing and health sciences*. Springer.

Watson, J. (2018). *Unitary caring science philosophy and praxis of nursing*.

University Press of Colorado.

Approved by CON Faculty Assembly, 9/25/2017; Revised Committee on Programs 10/ 8/2018; Presented for Action to CON Faculty Assembly 10/22/2018, Approved CON Faculty Assembly 10/22/18

Course Objectives/Student Learning Outcomes

Topic: Longitudinal Data Analysis

Justification: Many of the studies that both our student's and our faculty do are some form of longitudinal design. The complexities of these designs vary depending on the sophistication of the researcher and intricacy of the research study. Even though our students have been exposed to some of the different designs listed below, they have not explored them fully not considered issues with data collection, tracking participants over time and the varies types of statistical analyses with each ones strengths and weaknesses. This class would be appropriated for advances Ph.D. students and open to any faculty from our college that wanted to sitin.

TOPIC OUTLINE

1. Different Research Designs
    1. RM-Factorial ANOVA Design:

2. Cross-sectional:
3. Cohorts :
4. Interrupted time series:
5. RD Designs
6. AB/ BA Crossover designs:
7. Survival Analysis:

1. Data Collection Considerations: Missing Data
    1. Missing Data Analysis
    2. Methods for Addressing Missing Data
        1. Data Imputations
        2. Bootstrapping
    3. Three General Recommendations for Dealing with Missing Data
        1. Make explicit the assumptions of any methods used to cope with missing data: for example, that the data are assumed missing at random, or that missing values were assumed to have a particular value such as a poor outcome.
        2. Perform sensitivity analyses to assess how sensitive results are to reasonable changes in the assumptions that are made
        3. Address the potential impact of missing data on the findings in the Discussion section
    4. Data Collection Techniques
        1. Direct administration of a questionnaire or survey
        2. Mail
        3. Online
        4. Telephone
        5. Interview
        6. Archival

1. Strategies for tracking People over Time. Especially Over Multiple Years
    1. Technology for Tracking Individuals that Move.
    2. Money and Resources

1. Data Analysis
    1. Paired Sample t-test (Review)
    2. Repeated measures ANOVA (Review)
    3. Regression with Person Vectors
    4. HLM & General Linear Mixed Models
    5. Generalized Estimating Equations (GEE)
    6. Regression Discontinuity
    7. Survival Analysis
        1. Kaplan Meier
        2. Cox Regression
    8. Repeated Measures Structural Equation Models

Course Assignments

Date	Details	Due
Thu May 16, 2024	NGR 7845 Class 1: Face to Face	6pm to 8:50pm
Wed May 22, 2024	Discussion Topic Module 1 Discussion	due by 11:59pm
	Discussion Topic Discussion Module 2	to do: 11:59pm
Thu May 23, 2024	NGR 7845 Class 2: Online Only	6pm to 8:50pm
Thu May 30, 2024	NGR 7845 Class 3: Face to Face	6pm to 8:50pm
Thu May 30, 2024	Discussion Topic SPSS 26 and AMOS 26 Links and Information	to do: 5pm
Thu Jun 6, 2024	NGR 7845 Class 4: Online Only	6pm to 8:50pm
Wed Jun 12, 2024	Discussion Topic Discussion 3: Missing Data Analysis	due by 11:59pm

	Discussion Topic Discussion 4 Repeated Measures ANOVA and MANOVA	due by 11:59pm
Thu Jun 13, 2024	NGR 7845 Class 5: Face to Face	6pm to 8:50pm
Wed Jun 19, 2024	Discussion Topic Discussion 5: LMM Intro	due by 11:59pm
Thu Jun 20, 2024	NGR 7845 Class 6: Online Only	6pm to 8:50pm
Sat Jun 22, 2024	Extra Class 1: Review	1pm to 3pm
Thu Jun 27, 2024	NGR 7845 Class 7: Face to Face	6pm to 8:50pm
Wed Jul 10, 2024	Assignment Test 1	due by 11:58pm
Thu Jul 11, 2024	NGR 7845 Class 8: Online Only	6pm to 8:50pm
Wed Jul 17, 2024	Discussion Topic Discussion 6: GLMM	to do: 11:59pm
Thu Jul 18, 2024	NGR 7845 Class 9: Face to Face	6pm to 8:50pm
Wed Jul 24, 2024	Discussion Topic Discussion 7: Decision Process for Selecting Statistical Analysis	due by 11:59pm
Thu Jul 25, 2024	NGR 7845 Class 10: Online Only	6pm to 8:50pm
Wed Jul 31, 2024	Discussion Topic Discussion 8: Intro to SEM	due by 11:59pm

Thu Aug 2, 2024	NGR 7845 Class 11: Face to Face	6pm to 8:50pm

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. To ensure these rights, faculty members have the prerogative to:

• Establish and implement academic standards.

• Establish and enforce reasonable behavior standards in each class.

• Recommend disciplinary action for students whose behavior may be judged as disruptive under the Student Code of Conduct University Regulation 4.007.

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Course Evaluation Method

3 SPSS Assignments= 30 points of course grade: There will be three SPSS assignments covering the areas of Missing data analysis, Imputations, generalized linear mixed models (GLMM), generalized estimation of equations (GEE), Survival Analysis (Cox Regression), regression discontinuity analysis (DA), and longitudinal structural equation Modeling (SEM)

2- Tests = 200 points of course grade: The two tests will focus on practical application of the material covered during the class.

Collaborative Group Project = 200 points of course grade: The collaborative group project is a simulated research project where students select a group based on similar interests. They then write a small purpose, problem and methods section, create a simulated data set, run the analysis, and write-up the results and conclusions. The goal is to align the purpose problem, research questions, and research design with the correct statistical models. Check the project rubric for the section to include in the project. There is no review of the literature except of justification of statistical techniques.

Presentation of Project = 30 points of course grade: All groups will give a presentation of their collaborative projects in a 15 minute conference format (probably PowerPoint). Question sessions from students and the professor will follow directly after the presentation.

Critique of Quantitative Study = 25 points of course grade:A critique of a quantitative longitudinal research study will be completed. Each student has to find an appropriate peer reviewed journal article and report on the purpose, methods, statistical technique, design, and whether or not all aspects were aligned. Students will complete the Journal Critique Sheet in its entirety, score it, and report on the article's potential for acceptance as if the student were a reviewer.

Instructor & Group participation score= 15 points of course grade: Learning is a collaborative and interactive activity. Therefore, come to class prepared to participate. You are a vital aspect of the learning environment and students learn for other student's questions, comments and experiences. BE PREPARED TO SHARE

TOTAL = 500 Points

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

The University policy regarding academic integrity is enforced in this course. Students at Florida Atlantic University are expected to maintain the highest ethical standards. Dishonesty is considered a serious breach of these ethical standards, because it interferes with the University mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Dishonesty is also destructive of the University community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see:

http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

The College of Nursing regards adherence to the Code of Academic Integrity as a professional competency and an expectation of all students. ANY act of dishonesty that violates the code of

academic integrity and misrepresents your efforts or ability is grounds for immediate failure of the course.

Attendance Policy Statement

Students are expected to attend all their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances, and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

1. ATTENDENCE:
    - Absence from class: Although things occasionally cause one to miss class greater than 1 absence will result in the lowering of one letter great unless previously approved with the professor.
    - Habitual lateness does not demonstrate good professional behavior and is distracting to other students; habitual tardiness will result in the lowering of a letter grade.
    - Responsibility for obtaining the missed content rests with the student.

Religious Accommodation Policy Statement

In accordance with the rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs regarding admissions, registration, class attendance, and the scheduling of examinations and work assignments. University Regulation 2.007, Religious Observances, sets forth this policy for FAU and may be accessed on the FAU website at www.fau.edu/regulations.

Any student who feels aggrieved regarding religious accommodations may present a grievance to the executive director of The Office of Civil Rights and Title IX. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination.

Time Commitment Per Credit Hour

For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort are required for Summer Semesters, which usually have a shortened timeframe. Fully Online courses, hybrid, shortened, intensive format courses, and other non-traditional modes of delivery will demonstrate equivalent time and effort.

Course Grading Scale

Letter Grade	Letter Grade
A	94 - 100%
A-	90 - 93%
B+	87 - 89%
B	84 - 86%
B-	80 - 83%
C+	77 - 79%
C	74 - 76%
C-	70 - 73%
D+	67 - 69%
D	64 - 66%
D-	61- 63%
F	0 - 60%

Grade Appeal Process

You may request a review of the final course grade when you believe that one of the following conditions apply:

• There was a computational or recording error in the grading.

• The grading process used non-academic criteria.

• There was a gross violation of the instructor's own grading system.

University Regulation 4.002 of the University Regulations contains information on the grade appeals process

Policy on Make-up Tests, Late work, and Incompletes

The tests, homework, and all projects are take home open note, internet and even Chat GPT. You have unlimited attempts to turn in all work until the final grades are due.

Policy on the Recording of Lectures

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct and/or the Code of Academic Integrity.

All lectures are recorded through Zoom and are available to all students.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Artificial Intelligence Preamble

FAU recognizes the value of generative AI in facilitating learning. However, output generated by artificial intelligence (AI), such as written words, computations, code, artwork, images, music, etc., for example, is drawn from previously published materials and is not your own original work.

FAU students are not permitted to use AI for any course work unless explicitly allowed to do so by the instructor of the class for a specific assignment. **[Policy 12.16 Artificial Intelligence]**

Class policies related to AI use are decided by the individual faculty. Some faculty may permit the use of AI in some assignments but not others, and some faculty may prohibit the use of AI in their course entirely. In the case that an instructor permits the use of AI for some assignments, the assignment instructions will indicate when and how the use of AI is permitted in that specific assignment. It is the

student's responsibility to comply with the instructor's expectations for each assignment in each course. When AI is authorized, the student is also responsible and accountable for the content of the work. AI may generate inaccurate, false, or exaggerated information. Users should approach any generated content with skepticism and review any information generated by AI before using generated content as-is.

If you are unclear about whether or not the use of AI is permitted, ask your instructor before starting the assignment.

Failure to comply with the requirements related to the use of AI may constitute a violation of the **Florida Atlantic Code of Academic Integrity, Regulation 4.001.**

Proper Citation: If the use of AI is permitted for a specific assignment, then use of the AI tool must be properly documented and cited. For more information on how to properly cite the use of AI tools, visit **https://fau.edu/ai/citation**

College of Nursing Policies

Policies below may be found in:

a). The Christine E. Lynn College of Nursing Undergraduate Handbook located at: https://nursing.fau.edu/academics/student-resources/undergraduate/index.php

b). Florida Atlantic University's Academic Policies and Regulations

http://www.fau.edu/academic/registrar/FAUcatalog/academics.php and http://www.fau.edu/regulations

CODE OF ACADEMIC INTEGRITY:

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the University Regulation. For more information, see: https://www.fau.edu/regulations/documents/chapter4/reg4-001-6-7-22.pdf

CON Academic Integrity: https://nursing.fau.edu/academics/student-resources/undergraduate/academic-integrity-policy.php

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DISABILITY STATEMENT:

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at http://www.fau.edu/sas/

To apply for SAS accommodations: http://www.fau.edu/sas/

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS) CENTER

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

INCOMPLETE POLICY:

The Incomplete Grade Policy is enforced. A student who registers for a course but fails to complete the course requirements, without dropping the course, will normally receive a grade of "F" from the course instructor. A student who is passing a course but has not completed all the required work because of exceptional circumstances may, with the approval of the instructor, temporarily receive a

grade of “I” (incomplete). This must be changed to a grade other than “I” within a specified time frame, not to exceed one calendar year from the end of the semester during which the course was taken.

POLICY ON THE RECORDING OF LECTURES (OPTIONAL)

Because of a new Florida Statute in 2021, the following model language is suggested for inclusion in course syllabi, at the discretion of individual faculty:

Students enrolled in this course may record video or audio of class lectures for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording class activities other than class lectures, including but not limited to student presentations (whether individually or as part of a group), class discussion (except when incidental to and incorporated within a class lecture), labs, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, and private conversations between students in the class or between a student and the lecturer, is prohibited. Recordings may not be used as a substitute for class participation or class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University’s Student Code of Conduct and/or the Code of Academic Integrity.

ATTENDANCE POLICY:

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student’s responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student’s final course grade as a direct result of such absence.

RELIGIOUS ACCOMMODATION:

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments. Students who wish to be excused from coursework, class activities, or examinations must notify the instructor in advance of their intention to participate in religious observation and request an excused absence. The instructor will provide a reasonable opportunity to make up such excused absences. Any student who feels aggrieved regarding religious accommodations may present a grievance to the director of Equal Opportunity Programs. Any such grievances will follow Florida Atlantic University's established grievance procedure regarding alleged discrimination. For more information, see: https://www.fau.edu/provost/resources/files/religiousaccommodations-students-and-faculty-8-21-15.pdf

CON Religious Accommodation: http://www.fau.edu/sas/New.php

USE OF STUDENT COURSE MATERIAL

The Christine E. Lynn College of Nursing may use students' course-related materials for legitimate institutional purposes, such as accreditation, university review process, or state board of nursing review process, etc. In such cases, materials will be used within the college and university.

Student Support Services and Online Resources

- Center for Learning and Student Success (CLASS)
- Counseling and Psychological Services (CAPS)
- FAU Libraries
- Math Learning Center
- Office of Information Technology Helpdesk
- Center for Global Engagement
- Office of Undergraduate Research and Inquiry (OURI)
- Science Learning Center
- Speaking Center
- Student Accessibility Services
- Student Athlete Success Center (SASC)

- Testing and Certification
- Test Preparation
- University Academic Advising Services
- University Center for Excellence in Writing (UCEW)
- Writing Across the Curriculum (WAC)

Course Topical Outline

TOPIC OUTLINE

1. Different Research Designs
    1. RM-Factorial ANOVA Design:
    2. Cross-sectional:
    3. Cohorts :
    4. Interrupted time series:
    5. RD Designs
    6. AB/ BA Crossover designs:
    7. Survival Analysis:

1. Data Collection Considerations: Missing Data
    1. Missing Data Analysis
    2. Methods for Addressing Missing Data
        1. Data Imputations
        2. Bootstrapping
    3. Three General Recommendations for Dealing with Missing Data
        1. Make explicit the assumptions of any methods used to cope with missing data: for example, that the data are assumed missing at random, or that missing values were assumed to have a particular value such as a poor outcome.
        2. Perform sensitivity analyses to assess how sensitive results are to reasonable changes in the assumptions that are made
        3. Address the potential impact of missing data on the findings in the Discussion section
    4. Data Collection Techniques

        1. Direct administration of a questionnaire or survey
        2. Mail
        3. Online
        4. Telephone
        5. Interview
        6. Archival

1. Strategies for tracking People over Time. Especially Over Multiple Years
    1. Technology for Tracking Individuals that Move.
    2. Money and Resources

1. Data Analysis
    1. Paired Sample t-test (Review)
    2. Repeated measures ANOVA (Review)
    3. Regression with Person Vectors
    4. HLM & General Linear Mixed Models
    5. Generalized Estimating Equations (GEE)
    6. Regression Discontinuity
    7. Survival Analysis
        1. Kaplan Meier
        2. Cox Regression
    8. Repeated Measures Structural Equation Models

Course schedule

Date	Details	Location
Thu May 16, 2024	Class 1: Intro	In person & Online
Thu May 23, 2024	Class 2: Bootstraping	Online Only
Thu May 30, 2024	Class 3: Missing Data	In person & Online
Thu Jun 6, 2024	Class 4: Repeated Measures	Online Only
Thu Jun 13, 2024	Class 5: Into to LMM	In person & Online
Thu Jun 20, 2024	Class 6: Growth Models	Online Only

Thu Jun 27, 2024	Class 7: Generalzed Linear Mixed Models	In person & Online
Thu Jul 11, 2024	Class 8: Survival Analysis/ Forecasting	Online Only
Thu Jul 18, 2024	Class 19: SEM	In person &Online
Thu Jul 25, 2024	Class 10: Latent Growth Models	Online Only
Thu Aug 2, 2024	Class 11: Basyeian and Covariances	In person & Online

Professional Statement

http://nursing.fau.edu/academics/student-resources/undergraduate/policies-regulations/professional-statement.php

When students of nursing begin their course of study, they enter into an implied professional agreement-agreeing to abide by the American Nurses Association (ANA) Code of Nursing Ethics and to conduct themselves in all aspects of their lives in a manner becoming a professional nurse. The College of Nursing faculty holds a professional ethic of caring and healing, recognizing that each person's environment includes everything that surrounds an individual. Similarly, the College creates an environment that preserves the wholeness and dignity of self and others. The faculty requires self and socially responsible behavior and will not accept actions that can be perceived as hostile, threatening or unsafe to others. It is the College's expectation that students promote a positive public image of nursing. It is the College's goal, as a professional college, to build an expanding community of nursing scholars and leaders within the context of its' caring-based philosophy. Safety of the person being nursed and accountability for individual actions are priorities and/or critical components/elements of a professional nursing education. Students who do not abide by this policy will be subject to appropriate academic sanctions which may include disciplinary action, dismissal from the College of Nursing, and/or suspension or expulsion from the University.

Approved in Faculty Assembly 11/28/2016

FAU
FLORIDA ATLANTIC UNIVERSITY

CHRISTINE E. LYNN COLLEGE OF NURSING

STATEMENT OF PHILOSOPHY

Nursing is a discipline of knowledge and professional practice grounded in caring. Nursing makes a unique contribution to society by nurturing the wholeness of persons and environment in caring. Caring in nursing is an intentional mutual human process in which the nurse artistically responds with authentic presence to calls from persons to enhance well-being. Nursing occurs in nursing situations: co-created lived experiences in which the caring between nurses and persons enhance well-being. Nursing is both science and art. Nursing science is the evolving body of distinctive nursing knowledge developed through systematic inquiry and research. The art of nursing is the creative use of nursing knowledge in practice. Knowledge development and practice in nursing require the complex integration of multiple patters of knowing. Nurses collaborate and lead interprofessional research and practice to support the health and well-being of persons inextricably connected within a diverse global society.

Persons as participant in the co-created nursing situation, refers to individual, families or communities. Person is unique and irreducible, dynamically interconnected with others and the environment in caring relationships. The nature of being human is to be caring. Humans choose values that give meaning to living and enhance well-being. Well-being is creating and living the meaning of life. Persons are nurtured in their wholeness and well-being through caring relationships.

Beliefs about learning and environments that foster learning are grounded in our view of person, the nature of nursing and nursing knowledge and the mission of the University. Learning involves the lifelong creation of understanding through the integration of knowledge within a context of value and meaning. A supportive environment for learning is a caring environment. A caring environment is one in which all aspects of the person are respected, nurtured and celebrated. The learning environment supports faculty-student relationships that honor and value the contributions of all and the shared learning and growth.

The above fundamental beliefs concerning Nursing, Person and Learning express our values and guides the actions of Faculty as they pursue the missions of teaching, research/scholarship and service shared by the Christine E. Lynn College of Nursing and Florida Atlantic University.

'revised April, 2012.'

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