# http://www.ric.edu/webcommunications/images/SealWithText_Small_Black.pnggraduate COMMITTEE curriculum PROPOSAL FORM

## Cover page Scroll over blue text to see further [instructions](#instructions)

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| --- | --- | --- |
| A.1. [Course or program](#Proposal) | **NURS 524 Healthcare Statistics** |  |
| [Replacing](#Ifapplicable)  | **NURS 550 Healthcare Statistics** |  |
| A.2. [Proposal type](#type) | **Course: Creation** |  |
| A.3. [Originator](#Originator) | **Justin DiLibero** | [Home department](#home_dept) | **Nursing** |
| A.4. [Rationale](#Rationale)/Context | **The purpose of this proposal is to revise NURS 550 Healthcare Statistics to make this a permanent course within the graduate nursing department.** Doctor of Nursing Practice students require advanced knowledge of inferential statistics that are relevant to practice scholarship in healthcare. NURS 550 Healthcare statistics was initial developed and piloted to address this need. This course has consistently received outstanding student evaluations, and DNP program faculty report that students are better prepared for subsequent courses such as NURS 704 Clinical Research/Analytic Methods, NURS 703 Advanced Epidemiology and Biostatistics, and the DNP Scholarly Project courses.In addition, we are preparing to transition the nurse anesthesia education program from the MSN to the DNP level. The Council on Accreditation which accredits Nurse Anesthesia (NA) programs requires the inclusion of statistics course designed to meet the unique needs of these DNP students is included as part of the DNP curriculum for NA programs.The transition of the NURS 550 Healthcare statistics course to a permanent course will allow us to continue to meet the needs of both post-MSN and BSN to DNP students alike. |
| A.5. [Student impact](#student_impact) | **Provides a more affordably option than other programs, prevents students from having to enroll in courses outside of RIC due to lack of availability, and allows us to meet the changing criteria for accreditation of our NA program** |
| A.6. Impact on other programs |  |
| A.7. [Resource impact](#Resource) | *[Faculty PT & FT](#faculty" \o "Need to hire new full-time or part-time faculty? This is where you indicate if this proposal will be affecting FLH in your department/program.)*:  | **Will continue to use adjunct faculty to teach this course.** |
|  | [*Library*:](#library) | **No impact** |
|  | [*Technology*](#technology) | **No Impact** |
|  | [*Facilities*](#facilities): | **Course will continue as a hybrid in Summer I.** |
|  | Promotion/ Marketing needs  |  |
| A.8. [Semester effective](#Semester_effective) | **Summer I 2020** | A.9. Rationale if sooner than next fall |  |

B. [NEW OR REVISED COURSES](#delete_if):

|  | Old ([for revisions only](#Revisions) – list only information that is being revised) | New |
| --- | --- | --- |
| B.1. [Course prefix and number](#cours_title)  | **NURS 550** | **NURS 524** |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title)  | **Healthcare Statistics** | **Healthcare Statistics** |
| B.4. [Course description](#description)  |  | Statistical concepts of sampling, levels of measurement, inferential statistical tests, regression, and nonparametric methods are studied. Emphasis is on application of statistics in nursing research reports. |
| B.5. [Prerequisite(s)](#prereqs) |  | **Graduate status or DNP Program Director Approval** |
| B.6. [Offered](#Offered) |  | **Summer one | Annually** |
| B.7. [Contact hours](#contacthours)  |  | **3.0** |
| B.8. [Credit hours](#credits) |  | **3.0** |
| B.9. [Justify differences if any](#differences) |  |
| B.10. [Grading system](#grading)  |  | **Letter grade**  |
| B.11. [Instructional methods](#instr_methods) |  | **Lecture, small group, hybrid 50% online** |
| B.12.[Categories](#required) |  | **Required for program | Pre-requisite** |
| B.13. [How will student performance be evaluated?](#performance) |  | **Attendance | Class participation | Exams | Papers |** **Class Work Quizzes**  |
| B.14. [Redundancy with, existing courses](#competing) |  | **None** |
| B. 15. Other changes, if any |  |

| B.16**.** [**Course learning outcomes**](#outcomes)**: List each outcome in a separate row** | [**Professional organization standard(s)**](#standards)**, if relevant**  | [**How will the outcome be measured?**](#measured) |
| --- | --- | --- |
| Identify foundational concepts in research and clinical practice  |  | Lecture, readings, assignments, discussion |
| Analyze the data from continuous variables and categorical outcomes in research |  | Lecture, readings, assignments, discussion |
| Synthesize statistical models and their application  |  | Lecture, readings, assignments, discussion |
| Determine the efficacy of data management systems and privacy concerns |  | Lecture, readings, assignments, discussion |

| B.17. [**Topical outline**](#outline)**: Do NOT insert a full syllabus, only the topical outline** |
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| 1. FOUNDATIONAL CONCEPTS
	1. The Role of Statistics in Research and Clinical Practice
	2. Properties of Variables: Levels of Measurement
	3. Descriptive Univariate Statistics: Frequency Distributions and Histograms, Measures of Central Tendency, Skewness
	4. Elements of Probability: Empirical Probability, Statistical Independence, Conditional Probability, Bayes’ Theorem
	5. Statistical Inference: The Sampling Distribution, the Normal Distribution, Significance Tests
	6. Standard Errors, Confidence Intervals, Effect Size, and the Power of Statistical Tests
	7. Basics of Research Design and Types of Trials

2) ANALYSES OF DATA FROM CONTINUOUS VARIABLES a) Comparing Sample Means with the *t*-Test b) Decomposition of Variance using One-Way ANOVA c) Simple Relationships between Dependent and Independent Variables: Linear Regression and Pearson’s *r* Correlation d) Factorial Analysis of Variance and Analysis of Covariance among Multiple Variables e) Multiple Linear Regression f) Repeated-Measures Analysis of Co-Variance g) Introduction to Mixed-Effects Regression Models3) ANALYSES OF DATA FROM CATEGORICAL OUTCOMES a) Nonparametric/Ordinal Statistics b) Frequency Cross-Tabulations: 2 × 2 Tables c) Logistic Regression with One Independent Variable d) Logistic Regression Models with Multiple Predictors4) MODELS FOR TIME-TO-EVENT DATA/SURVIVAL ANALYSIS a) Incidence Rates, Life Tables, and Survival Function1. Comparing Survival Functions in Different Groups and Hazard Regression
2. MEASUREMENT MODELS
3. Reliability Coefficients and Medical Test Evaluation
4. Factor Analysis and Internal Consistency
5. ISSUES IN DATA MANAGEMENT
6. Data Management and Privacy Concerns

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| **INSTRUCTIONS FOR PREPARING THE CATALOG COPY**: The proposal must include all relevant pages from the college catalog, and must show how the catalog will be revised. (1) Go to the “Forms and Information” page on the Graduate Committee website. Scroll down until you see the Word files for the current catalog. (2) Download ALL catalog sections relevant for this proposal, including course descriptions and/or other affected programs. (3) Place ALL relevant catalog copy into a single file. Put page breaks between sections and delete any catalog pages not relevant for this proposal. (4) Using the track changes function, revise the catalog pages to demonstrate what the information should look like in next year’s catalog. (5) Check the revised catalog pages against the proposal form, especially making sure that program totals are correct if adding/deleting course credits.  |

## D. Signatures

* Changes that directly impact more than one department/program MUST have the signatures of all relevant department chairs, program directors, and relevant dean (e.g. when creating/revising a program using courses from other departments/programs).
* Proposals that do not have appropriate approval signatures will not be considered.
* Type in name of person signing and their position/affiliation.
* Send electronic files of this proposal and accompanying catalog copy to graduatecommittee@ric.edu and a printed or electronic signature copy of this form to the current Chair of Graduate Committee. Check Graduate Committee website for due dates.

##### D.1. Approvals: required from programs/departments/deans who originate the proposal. may include multiple departments, e.g., for joint/interdisciplinary prposals.

| Name | Position/affiliation | [Signature](#_Signature" \o "Insert electronic signature, if available, in this column) | Date |
| --- | --- | --- | --- |
| Justin DiLibero | Program Director of DNP |  |  |
| Joanne Costello | Interim Chair of Graduate Nursing |  |  |
| Debra Servello | Interim Dean of Nursing |  |  |