New Undergraduate Course Approval Cover Form
Montana State University

This four-page form collects basic information about the proposed new course, provides information on the approval process, and includes all required approvals. Additional information (see INFO sheet) is also required as part of the New Course Packet.

Proposed New Course Information

Requested Rubric, Course Number, Core Designation (if needed): NRSG 489

Course Title: Research and Statistics to Support Evidence-based Practice

Abbreviated Course Title (≤ 30 chars): Research and Statistics

First Semester to be Offered: Spring 2015

Submitted by: Susan Raph

Submitter’s Contact Info: Phone, Email: 406-771-4441 sraph@montana.edu

Instructor: Charles Winters

Department: Missoula-Kalispell Campus

College: College of Nursing

New Course Review Process

Instructor completes the New Course Packet, with Core information if a Core designation is requested.

Instructor checks for “equivalent” course in the MUS system and recommends a common or unique course number.

Department Head’s signature indicates that course has been approved by the process used within the Department.

The Chair of the College Curriculum Committee signs to indicate College academic approval.

The College Dean signs to indicate that adequate resources are available to offer the course. Supporting information (Dean’s Statement) is typically required.

The New Course Packet (as PDF) is uploaded to the Provost’s Office server for distribution to other committees.

Course requests are sent to Curriculum and Program Committee (CPC). Core reviews are sent to appropriate Core Subcommittee. Committees work in parallel when possible to speed approval process. Special topics courses (291, 491) skip the CPC review (limited to two years.)

Provost’s Office reviews the new course request. New courses are submitted to MUS for Common Course Number (CCN) review. Dean and Department informed upon approval.

Approved new course sent to Registrar for inclusion in the Catalog and Schedule of Classes.

Note: This diagram illustrates the typical flow path, but at any review step there can be a request for additional information or modifications. Careful review in early steps is the best way to speed the overall process. * Special topics courses (x91) require fewer signatures, but cannot be offered more than two times without committee review.
INFORMATION NEEDED FOR COMMON COURSE NUMBERING

The process for identifying a common course number for a new course is as follows:

1. Course learning outcomes are prepared for the new course.
2. The person submitting the new course request looks at the CCN website to see if a course with similar outcomes already exists in the MUS system.
   
   www.mus.edu/Qtools/CCN/ccn_default.asp

   • If a course exists with at least 80% of the same outcomes, the course is considered “equivalent” to the proposed new course, and the new course should use the existing rubric and course number.
   
   • If no “equivalent” course is found, the person submitting the new course request should identify a unique course number that has not been used by any other course in the MUS system.
3. The requested rubric and course number are submitted as part of the new course packet.
4. The Provost’s Office submits the learning outcomes and the requested rubric and course number to the MUS to have a course number assigned to the course. (This will typically be the requested course number, but it could be changed.)
5. The assigned common course number is reported back to the person submitting the new course request.

Requested Rubric, Course Number, Core Designation (If needed):

   Course Title: Research and Statistics to Support Evidence-based Practice
   Abbrev. Course Title (≤ 30 char): Research and Statistics
   Credits: 6
   Department Offering Course: Missoula-Kalispell Campus
   College: College of Nursing

Is this course “equivalent” to a course in the MUS System?: ☐ Yes ☑ No

Learning Outcomes for the Course:

1. Examine the research process and steps of research.
2. Discuss the roles of research in evidence-based practice.
3. Explain the importance of evidence as a basis for improving clinical outcomes.
4. Compare and contrast research and quality assurance/quality improvement and evidence-based practice.
5. Formulate research questions based on clinical problems.
6. Select, apply, and interpret common statistical tests to answer research questions and hypotheses.
7. Critique research reports with a focus on application to nursing practice.
8. Apply aspects of the research process to a selected health care issue.
9. Demonstrate behaviors that are congruent with the legal and ethical standards guiding health science and nursing research.
10. Demonstrate behaviors that are congruent with the ANA Code of Ethics, Scope and Standards of Practice, and Social Policy Statements in all class related interactions.
INFORMATION REQUIRED BY THE REGISTRAR

The data needed to enter the new course into the MSU Catalog and Schedule of Classes is collected on this page. Once the new course has been approved, this page is automatically forwarded to the Registrar for data entry.

Assigned Rubric, Course Number, Core Designation (if needed): NRSG 489
Course Title (for Catalog): Research and Statistics to Support Evidence Based Practice
Course Title (for Schedule of Classes, 30 characters, max.): Research and Statistics
First Semester to be Offered: Fall 2014
Restricted Entry/Consent of Instructor Required: ☐ Yes ☐ No
Instructor’s GID (last 4 digits only): 888
Department Offering Course: College of Nursing
College: College of Nursing

Is the requested course number available? (x4155 to check): ☐ Yes ☐ No
Frequency of course offering: ☑ Annually ☐ Alternate Years, starting ______
Semester(s) offered (check all that apply): ☐ Summer ☐ Fall ☐ Spring
Summer Options (check all that apply): ☐ First 6 weeks ☐ Second 6 weeks ☐ 12 weeks

Credits by mode of instruction: 
Lecture: 5
Seminar: 
Independent Study: 
Lab/Studio: 1
Recitation/Discussion: 
TOTAL CREDITS: 6

Primary Mode(s) of Delivery: ☐ Face-to-face ☐ Web-Enhanced (small on-line comp.)
☒ On-Line Only ☐ Blended (significant on-line portion)

Time and Location – Call the Registrar’s Office at x4155 to find a time and location for the course.

Assigned Day(s): ☐ M ☐ Tu ☐ W ☐ Th ☐ F ☐ Sa ☐ Su
Assigned Time(s): 
Assigned Building: 
Assigned Room: 
Capacity (room capacity, or enrollment “cap”): none

Co- and Pre-Requisites – Courses numbered 200 and above are normally expected to have prerequisites. When listing multiple prerequisites, please separate courses with “and” if both are required, or “or” if only one is required.

Prerequisite(s): none
Co-Requisite(s): none

Course Description – Provide a course description of 40 words or less for the MSU Catalog.

This course provides an introduction to research principles, methodologies and statistical procedures used to analyze data to support evidence-based practice. Emphasis is placed on critical analysis of nursing and health care research and the correct application and interpretation of statistics.
DEAN’S STATEMENT

The reviewing committees are being asked to take a closer look at the resources required for each proposed new course. In many cases new courses will replace existing courses and the new course request is effectively resource neutral, however that is not always the case. For example, a new elective course that would result in distributing an existing student population across a larger number of courses would represent a significant increase in expenditures for the new course, and no increase in total student credit hours. A funding mechanism for such a course would need to be identified. The Dean’s Statement is the place to document how the costs of the proposed new course will be covered.

The College of Nursing’s Strategic Plan has two action/tactics that refer to establishing an RN-MN program:

- 1.4.a Participate in state-wide efforts through the Center to Advance Health through Nursing (CAHN) to create seamless nursing education from AD to MN
- 1.4.b Cost-effectively implement an ADN - MN program

Additional faculty and staff resources will be needed to implement this program. The ADRN-MN degree program will require two new undergraduate level courses (12 credits). Additionally, the increased enrollment at the graduate level as students matriculate into the Clinical Nurse Leader courses will result in the need for additional sections of six courses (17 credits) currently offered in the graduate program. This gives the College an additional 29 credits of instruction that we need to support. Based on the 29 additional credits to be taught, the College is requesting an additional 1.7 faculty FTE for a total amount of $103,208. However, since the new ADRN-MN students would not require the addition of all 29 credits to our program in their first year, we are requesting staggered increase to our base budget with 52% ($53,668) added to the FY15 budget, and the remaining 48% ($49,540) distributed to the College for FY16. A .5 FTE staff position (program assistant) is also being requested at the cost of $11,000.

On the revenue side, additional tuition dollars will be generated by the increased number of students (and associated student credit hour generation). Using the 2013/2014 MSU undergraduate resident rate of $222.10/credit and graduate resident tuition rates of $266.50/credit, $129,264 increased tuition revenue would be generated if 10 students were admitted and $193,897 if 15 students were admitted. Tuition revenue will exceed the increased salary costs to the College.
New Undergraduate Course Narrative
Montana State University

Please provide the following information in narrative format. Substantive responses to all criteria are required. Although not required, a draft syllabus can also be helpful to the committee in understanding the details of the proposed course.

General Course Information
1. Requested Rubric, Course Number, and Core Designation (if any)

> NRSG 489

2. Course Title

> Research and statistics to support evidence-based practice

3. Provide a general description of the course explaining the need for the course, its goals, and its overall structure. This is the most important part of the application and should offer a good sense of what students will experience by taking this class.

> This course serves as a required transition course for nurses with an associate of science in nursing (ASN) degree admitted to the RN to MN option of the College of Nursing. The RN-MN option will allow nurses with an ASN degree to move seamlessly into the master’s option following successful completion of three courses, including two undergraduate transition courses and one graduate level course. This transitional course will provide foundational information that is ordinarily not included in ASN programs in preparation for success in graduate level nursing courses that require understanding of research and statistics. The course provides a rigorous introduction to research principles and methodologies and the statistical procedures used most often to analyze data to support evidence-based practice. Emphasis is placed on critical analysis of nursing and health care research including the correct application and interpretation of statistical data. Successful completion of this course, a second transitional course, and one specified graduate course is required for admission to the graduate option.

4. Based on what types of student work (e.g., tests, homework assignments, papers, performances, etc.) will grades be determined?

> The course objectives (below) have been approved by the College of Nursing faculty. Students will be evaluated on their attainment of the objectives using a variety of methods including papers, response to discussion questions and other individual and group learning activities, and exams.

1. Examine the research process and steps of research.
2. Discuss the roles of research in evidence based practice.
3. Explain the importance of evidence as a basis for improving clinical outcomes.
4. Compare and contrast research and quality assurance/quality improvement and evidence-based practice.
5. Formulate research questions based on clinical problems.
6. Select, apply, and interpret common statistical tests to answer research questions and hypotheses.
7. Critique research reports with a focus on application to nursing practice.
8. Apply aspects of the research process to a selected health care issue.
9. Demonstrate behaviors that are congruent with the legal and ethical standards guiding health science and nursing research.
10. Demonstrate behaviors that are congruent with the ANA Code of Ethics, Scope and Standards of Practice, and Social Policy Statements in all class related interactions.

5. Provide a course content outline containing all major topics plus a brief description of the material to be covered under each major topic heading.

> Suggested content for the course includes:
1. Introduction to research principles and methods.
   - Historical perspectives of nursing research
   - Philosophical paradigms for nursing research
   - Purposes of nursing research
   - Quantitative and qualitative research methods and design
2. The role of conceptual frameworks / theories in research.
   - Historical perspectives on grand theories, mid-range theories, and specific theories
   - Pathways to answering clinical questions/solving clinical problems
   - Developing a theoretical or conceptual context to inform research
   - Formulating research questions and hypotheses
3. Differentiation of research and quality assurance / quality improvement.
   - Improving practice vs changing practice paradigms
4. Role of research in evidence-based practice.
   - Background of research translation for evidence based nursing practice
   - Sources of evidence for nursing practice and research
   - Reviewing and critiquing primary evidence
5. Legal and ethical principles guiding health research including the protection of human subjects.
   - Beneficence
   - Respect for human dignity
   - Justice, Informed consent
   - Confidentiality
   - Vulnerable populations
   - Research misconduct
6. Introduction to descriptive and inferential statistics
   - Levels of data
   - Central tendency and dispersion
   - Descriptive data analysis
   - Inferential data analysis
   - Tests of mean difference
   - Tests of relationship between and among variables
Hypothesis testing
Type I and type II error

7. Processes used to critically evaluate evidence.
   Critique of research design, methods, and data analysis

6. List required texts or other required references.
   > Numerous suitable nursing research texts are available - examples Polit and Beck (2013),
   Suitable statistics text examples include Polit (2010), and Kim and Mallory (2013).

7. What are the estimated enrollment and student credit hour (SCH) production?
   \[ \text{SCH} = (\text{enrollment} \times \text{credits}) \]

> This is a 6 credit course (5 credits lecture and 1 credit college laboratory). With an estimated
  enrollment of 15 the SCH = 90.

8. Will there be an enrollment cap that restricts enrollment below the level of student demand? If so,
   what is the enrollment cap and why is it necessary?

> None

9. Will course be a “restricted enrollment” course? If so, why is restricted enrollment necessary?

> Yes, enrollment is based upon application and provisional acceptance into the College of Nursing
   Clinical Nurse Leader graduate program.

10. Describe how the success of the course will be evaluated? (“End-of-semester student evaluations” is
    not the answer to this question. How will the instructor determine if the learning outcomes are
    being met, and how will the department determine if the course is fulfilling its intended purpose?)

> New courses in the College of Nursing are evaluated by faculty teaching the course, the enrolled
students, the appropriate faculty committee within the College, e.g. the Graduate Academic Affairs
Committee or Undergraduate Academic Affairs Committee, and the Undergraduate and Graduate
Associate Deans following the first offering of the course. Using an evaluation guide developed for
this purpose, the course is evaluated for appropriate credit allocation, prerequisites, student
workload, content, and the student's ability to achieve course objectives. This evaluation
supplements the end-of-semester evaluation routinely conducted at the end of each term. Faculty
work with the curriculum committee to make any necessary improvements to the course.

11. Is the instructor a member of the regular faculty (i.e., tenured or tenure-track)? If no, please
    describe the instructor's qualifications, attach a Vita, and provide a separate letter of support,
    signed by the department head (or appropriate unit director), addressing the instructor's
    qualifications to teach this course.

> Instructors are members of regular faculty

Level of Offering

12. Has the course been offered previously under 280/291 or 480/491? If so, when? Under what
    number? What was the enrollment? What level of students took the course?
13. Justify the level of course offering.

The course will be offered at the undergraduate level and will serve as a transition course for experienced ASN-prepared nurses entering the RN-MN graduate option. The course is a hybrid course, combining two content areas (research and statistics) typically found in baccalaureate nursing programs and generally omitted from ASN curricula. The hybrid nature of the course will allow the College of Nursing to efficiently and effectively address an unmet need expressed by associate degree RNs for access to higher education without undue burden (length of program) being placed on them. The rigor of the course will provide an excellent context to students who seek this option, giving them an opportunity to test their commitment to this option for streamlined, but serious academic acceleration.

Relationship to other Courses, Curricula, and Departments
14. Does this course build on or interrelate with other courses in your curriculum or related curricula? If so, which ones?

Students will also take a rigorous transitional course on leadership and community health/population based nursing, and one graduate ethics course. Content between and among courses will interrelate, and these three courses are a foundation for success in the master’s level Clinical Nurse Leader track.

15. Do the topics in the proposed course duplicate or reiterate those in other courses in this or any other department? If so, how do the coverage and educational experience differ and how is this duplication or reiteration justified? Also, what liaison (which is expected in cases of apparent overlap) has been conducted with other departments? Report reactions, both favorable and unfavorable.

This course is unique.

16. What programs (departments, colleges) will be impacted by the SCH production of this course? That is, where do you think the SCH in the proposed course are likely to come from? If the expected SCH production of the proposed course is greater than 1000, and the SCH are expected to come from other colleges, what steps have been taken to make the other units aware of the potential loss of SCH? Report reactions, both favorable and unfavorable.

Other colleges are not likely to be impacted. This course is one of three in a new option that is proposed to bring a currently unserved population of potential students into the higher education academic environment.

17. If this proposed course has a significant interdisciplinary component, please explain briefly. Otherwise, indicate n/a.

Students Served
18. Does the proposed course serve majors only? Non-majors only? Both majors and non-majors? What other majors might be interested in this course? State areas or disciplines to be served and indicate the specific efforts that will be made to make the course material relevant to all disciplines served.

> The course serves nursing majors. It is a transition course for ASN-prepared nurses admitted to the new RN-MN option. Course content addresses a gap in ASN educational programs related to fundamentals of research and basic statistical methods necessary for graduate education.

Resources
19. What additional resources (e.g., additional instructional FTE, required technologies), if any, will be required to offer this course? Are there any resource issues for the students who will take the course (e.g., required technologies, travel, on-line access requirements)? Will there be an additional fee charged to students taking this course? Please explain.

> Additional instructional FTE required to teach this course will be placed into the College of Nursing workload matrix. The curriculum will be distance delivered, therefore students will be expected to have access to a computer sufficient to take the online course.

20. What existing information resources — print (books, journals, documents), audiovisual (videos, DVDs, CDs or other), and/or electronic (e-books, databases, electronic journals and web sites) — provided by the MSU Libraries will be used by students in this course? Provide examples as well as descriptive information. If additional information resources are necessary, please discuss those acquisitions with the library (x6549 Collection Development) at least three months prior to the beginning of the semester in which this course will be taught.

> Students will need to access web based scientific literature through MSU library services.

Other Supporting Material
21. Include any additional information you feel is needed to support this request.
MONTANA STATE UNIVERSITY COLLEGE OF NURSING
Master Resource Outline

NURS 489 Research and statistics to support evidence-based practice
Credits: 6 (5 lecture, 1 college laboratory)
Semesters Offered:
Pre-requisites:

Course Description: This course provides an introduction to research principles and methodologies and the statistical procedures used most often to analyze data to support evidence-based practice. Emphasis is placed on critical analysis of nursing and health care research including the correct application and interpretation of statistical data.

Course Objectives:
1. Examine the research process and steps of research.
2. Discuss the roles of research in evidence based practice.
3. Explain the importance of evidence as a basis for improving clinical outcomes.
4. Compare and contrast research and quality assurance/quality improvement and evidence-based practice.
5. Formulate research questions based on clinical problems.
6. Select, apply, and interpret common statistical tests to answer research questions and hypotheses.
7. Critique research reports with a focus on application to nursing practice.
8. Apply aspects of the research process to a selected health care issue.
9. Demonstrate behaviors that are congruent with the legal and ethical standards guiding health science and nursing research.
10. Demonstrate behaviors that are congruent with the ANA Code of Ethics, Scope and Standards of Practice, and Social Policy Statements in all class related interactions.

Recommended Content

1. Introduction to research principles and methods.
2. Differentiation of research and quality assurance / quality improvement.
3. Role of research in evidence-based practice.
4. Legal and ethical principles guiding health research including the protection of human subjects.
5. The role of conceptual frameworks / theories in research.
6. Introduction to descriptive and inferential statistics.
7. Processes used to critically evaluate evidence.

Approved by UAAC 9/16/13
Approved by Faculty 8/19/13