Graduate Curriculum Committee (GCC)

Meeting Minutes Wednesday, February 15, 2012

Regular Members Present:

Rose Allen (Chair) Jim Decker (Vice-Chair) Carol Brown Hamid Fonooni Ravi Paul Bob Thompson

Regular Members Absent/Excused:

Will Forsythe

Ex-Officio Members Present:

Linner Griffin

Ex-Officio Members Absent/Excused:

Marc Stevens

Academic Program Planning and Development:

Kimberly Nicholson and Karen Summey

Guests:

College of Nursing: Bobby Lowery, Linda Mayne, Carol Winters-Moorhead, and Connie Mullinix

Thomas Harriot College of Arts and Sciences: Richard Miller, Heather Ries, and Jerry Weitz

Actions of Committee:

I. Call to Order

1. Report on Graduate Council Actions

The Graduate Council has not met since the last GCC meeting.

2. The 02-01-12 GCC minutes were approved electronically and forwarded to the Graduate Council for agenda placement.

The 01-18-12 and 02-01-12 GCC minutes will be reviewed at the 02-20-12 Graduate Council meeting.

II. College of Nursing

Revision of Existing Degree: Master of Science in Nursing

Approved

III. College of Nursing

Proposal of New Course: NURS 7445

Approved as amended

- (1.) Revise justification
- (2.) Revise course credit
- (3.) Revise affected degrees or academic programs
- (4.) Revise course objectives

IV. College of Nursing

The unit was asked to revise the memorandum of request to fix issues with dates and grammar.

Revision of Existing Courses: NURS 6615, 6621, 6622, 6623

Approved as amended

- (1.) Revise justification (NURS 6615, 6621, 6622, 6623)
- (2.) Revise course description (NURS 6615, 6622, 6623)
- (3.) Revise course objectives (NURS 6621)
- (4.) Revise marked catalog copy (NURS 6621, 6622, 6623)

Title Revision of Existing Concentration: Adult Nurse Practitioner (to Adult-Gerontology Nurse Practitioner)

Approved as amended

Title Revision of Existing Post MSN Certificate Program: Adult Nurse Practitioner (to Adult-Gerontology Nurse Practitioner)

Approved as amended

V. Thomas Harriot College of Arts and Sciences, Department of Geological Sciences

Proposal of New Courses: GEOL 7600, 7601

Approved as amended

- (1.) Revise memorandum of request
- (2.) These courses will be offered as electives
- (3.) Revise justification
- (4.) Revise course credit
- (5.) Revise affected degrees or academic programs
- (6.) Revise course objectives

VI. Thomas Harriot College, Department of Geography – postponed

Notification of Intent to Plan: Master of Community Planning

Postponed

- (1.) Contact the accrediting body to see if there is a retroactive provision that addresses the first 25 students who will graduate prior to the program becoming eligible for application for accreditation.
- (2.) Consider possible need, at initiation of program, for recruitment of ECU undergraduate students within discipline in order to achieve needed enrollment numbers.
- (3.) Be prepared to qualify strong statements throughout the package, such as those found on pgs. 5 and 6 of *Appendix A: Notification of Intent to Plan* document "no other department or program is more centrally concerned with environmental sustainability" and "no other program at ECU has greater potential for ECU to fulfill the ..."
- (4.) Obtain a letter of support from the Center of Sustainable Tourism that supports the statement on pg. 7 of *Appendix A: Notification of Intent to Plan* document "is not considered to be in competition" with the MS in Sustainable Tourism currently offered at ECU.
- (5.) Refrain from hyperbolizing the number of students turned away annually by the University of North Carolina at Chapel Hill. Text on pg. 11 of *Appendix A: Notification of Intent to Plan* document illustrates a section where caution may be used when presenting statistical data. Consider that the numbers may not represent "qualified" applicants.
- (6.) Strive to achieve at least a neutral budget status and be able to defend. Concerns were raised regarding the (-) net budget and (-) net 4 year startup period figures in the budget. It was noted that university monies are not transferable to the academic side.
- (7.) Revise the *State Funding Matrix* section of the budget template to address mix of PT/FT students. Clearly identify if the program will be a 2 year program or require 48 hours for completion.
- (8.) Build flexibility into the curriculum, such as collaboration with other units across campus. If their students could take some of their graduate-level elective courses from other units, or if some of the courses in the curriculum were cross-listed, this would strengthen the proposal.
- (9.) Clarify program prerequisites and/or advanced status definitions when developing the admissions and curricular requirements.
- (10.) Consider DE options. Offering the program through DE would broaden the target population, enrich students and faculty, increase the quality of the students, and increase the enrollment numbers. Broaden focus to include both sort term and long term impacts from the structure of the program. If a change is made to the potential delivery method of the courses and/or program it was noted that the enrollment assumptions within the budget documents would need to be revised as well.
- (11.) Consider faculty load and professional development for faculty when determining delivery method of courses and/or the program.
- (12.) Dr. Thompson offered to assist the unit in revising the budget and assumptions. Dr. Griffin strongly encouraged the unit to take Dr. Thompson up on his offer. It

- was suggested that Dr. Ries participate in the budget meeting. It might be prudent to take some of these issues/concerns back to the unit faculty for further discussion. The committee stressed that it is very important to make sure the unit faculty are consulted if there are any substantive revisions.
- (13.) It was explained to the unit that the Graduate Council checks to see if recommendations from the GCC are incorporated into program development packages. The unit should incorporate the suggestions, or provide a justifiable response, in memorandum format.
- (14.) Due to the volume of revisions suggested by the GCC the package was postponed. The unit was advised to resubmit the entire package, once all of the committee suggestions have been addressed, to the GCC mailbox (gcc@ecu.edu) by close of business 03-07-12 in order to be considered for placement on the 03-21-12 agenda. This is the last meeting of the academic year at which the committee will review curricular/program development packages. To ensure agenda placement, the unit was encourages to submit as early as possible so any issues can be addresses before the submission deadline. To assist the GCC members in the review of the package, the unit was asked to identify any new or revised text within each document with yellow highlighting.

III. Old Business

1. Implement any actions recommended by the Graduate Council relative to 5000-level courses.

Dr. Allen shared that the newly revised *Recommendations for utilizing 5000-level courses* document created by the Graduate Council Executive Committee is to be discussed and possibly approved at the 02-20-12 meeting. Dr. Thompson requested that the Graduate Council minutes clearly identify if 5000-level courses can be revised, unbanked, and created. This would alleviate confusion and provide guidance to the GCC regarding the revision of the *Graduate Curriculum and Program Development* manual and GCC forms.

2. Send forward a motion to the Graduate Council for an Active Courses Not Offered in 10+ Years Action Plan.

Postponed.

The committee would like to initiate the one time cleanup prior to creating a formalized policy/plan of action that will institutionalize the process.

3. Vice Chair Decker recommended the GCC continue their work with the Graduate Working Group on 3.6.2 Graduate Curriculum.

No discussion.

4. Develop training modules utilizing Mediasite technology with topics to include: Pieces in a Curriculum Development Package, Completion of the Course Proposal Form, and Tips for Certificate Planners. Recordings will be posted on the GCC Web site.

No discussion.

5. SACS Principle 4.9

No discussion.

VI. New Business

1. Method/format of communications with faculty, curriculum/program planners, and the university community.

The committee would like to continue with the current methods of communication and voted "no" to the following actions:

- Routing e-mails through the GCC or other mailboxes; e-mails sent on behalf of the committee will continue to be sent from Kimberly Nicholson, who currently acts in the capacity of secretary for the GCC
- Changes to the footer
- Reformatting of e-mails; it will the responsibility of others to reformat if they choose to redistribute e-mails sent on behalf of the GCC

2. Cancellation of spring curriculum development workshop. Approved.

The GCC approved the motion to cancel the spring curriculum development workshop due to pending changes to the academic program development (APD) process. Once the campus-wide process revisions are confirmed, preparations will begin for educating faculty at the beginning of fall. Dr. Griffin shared that discussions regarding revision of Part V, section III of the Faculty Manual are underway. Coordination efforts will be initiated between the UCC, GCC, and the Office of Academic Program Planning and Development for fall workshop planning. It was noted that fall program development package submissions will need to comply with the new standards.

3. Notification of Intent to Plan: MS in Hispanic Studies approved as amended at the 01-18-12 GCC meeting.

The committee did not review the revised budget documents submitted by the unit on 02-13-12, as both the revision deadline and extended submission deadline had passed. The GCC will await the Graduate Council's decision on whether the package can move forward in the APD process or be sent back to the GCC for further review. This package is tentatively scheduled for review by the Graduate Council on 02-20-12. The unit can request permission at that time to present the revised budget documents.

Marked Catalog Copy:

II. College of Nursing

http://www.ecu.edu/cs-acad/grcat/programNURS.cfm

Degree Requirements

Depending upon the concentration area chosen within the degree program, the master of science in nursing requires 36-68 s.h. credit as follows. Concentrations are clustered as administrative, clinical, and education.

Administrative:

Nursing Leadership - Acute Care Health Systems, 41 s.h.

Nursing Leadership – Community Based Health Systems, 41 s.h.

Nursing Leadership – Educational Systems, 41 s.h.

Clinical:

Adult Nurse Practitioner, 46 s.h.

Clinical Nurse Specialist in Adult Health, 42 s.h.

Family Nurse Practitioner, 50 s.h.

Neonatal Nurse Practitioner, 41 s.h.

Nurse Anesthesia, 68 s.h.

Nurse Midwifery, 50 s.h.

Education:

Nursing Education, 36 s.h.

Requirements:

- 1. Common core: NURS 6001, 6002, 6991, 6992, 6993 12 s.h.
- 2. Cluster core (Choose appropriate cluster for concentration.) 9-20 s.h.

Adult Nurse Practitioner (9 s.h.): NURS 6050, 6610, 6611

Clinical Nurse Specialist in Adult Health (12 s.h.): NURS 6050, 6208, 6610, 6611

Family Nurse Practitioner (9 s.h.): NURS 6050, 6610, 6611

Neonatal Nurse Practitioner (9 s.h.): NURS 6417, 6418, 6419

Nurse Anesthesia (20 s.h.): NURS 6610, 6810, 6811, 6813; PTHE 8008

Nurse Midwifery (9 s.h.): NURS 6050, 6610, 6611

Nursing Education (9 s.h.): Select 9 s.h. of course work in consultation with advisor from such courses as: NURS 6050, 6110, 6610, 6611, 6035, 6208, 6214, 6224, 6984, 7271

Nursing Leadership: NURS (10 s.h.) NURS 6971, 6973, 6974, 6986

3. Concentration area (Choose one area.) - 15-36 s.h.

Administrative (19 s.h.):

Nursing Leadership – Acute Care Health Systems (19 s.h.): NURS 6977, 6978, 6983, 6984, 6985, 3 s.h. electives

Nursing Leadership – Community Based Health Systems (19 s.h.): NURS 6310, 6311, 6977, 6978, 6983, 6984

Nursing Leadership – Educational Health Systems (19 s.h.): NURS 6903, 6904, 6909, 6977, 6978, 6983

Clinical (18-36 s.h.):

Adult Nurse Practitioner (25 s.h.) 6612, 6613, 6614, 6615, 6618, 6621, 6622, 6623 Clinical Nurse Specialist in Adult Health (18s.h.): NURS 6959, 6960, 6961, 6962; 6 s.h. clinical specialty courses

Family Nurse Practitioner (29 s.h.): NURS 6612, 6613, 6614, 6615, 6616, 6617, 6618, 6619, 6620

Neonatal Nurse Practitioner (20 s.h.): NURS 6420, 6421, 6422, 6423, 6424, 6425 Nurse Anesthesia (36 s.h.): NURS 6805, 6806, 6812, 6814, 6815, 6816, 6817, 6818, 6819, 6820, 6821, 6822, 6823, 6824

Nurse Midwifery (29 s.h.): NURS 6109, 6110, 6112, 6113, 6115, 6116, 6117, 6118, 6119 Nursing Education (15 s.h.): NURS 6903, 6904, 6905; 6909; 3 s.h. elective or cognate

- 4. Students in the Nursing Education concentration who have limited teaching experience may be required to take NURS 6908.
- 5. Students in the Nursing Leadership concentration who have limited finance experience may be required to take NURS 6987.

Enrollment is necessary for continued research advisement. A comprehensive assessment is required for graduation for all MSN degree-seeking students.

Students in the RN/MSN option must complete the following undergraduate courses prior to enrolling in any graduate nursing courses–NURS 3020, 3021, 3510, 3900, 4210, 4211.

III. College of Nursing

http://www.ecu.edu/cs-acad/grcat/coursesNURS.cfm

NURS: Nursing

7000. Thesis (1-6)

May be repeated. May count maximum of 3 s.h.

7001. Thesis: Summer Research (1)

May be repeated. No credit may count toward degree. Students conducting thesis research may only register for this course during the summer.

7003. Health Disparities/Inequities Research (3)

P: Admission to the PhD in nursing program or consent of instructor. Exploration and design of strategies to address health disparities/inequities.

7004. Research Ethics for a Complex World (2) Same as HUMS 7004 and GRAD 7004

- Concerned with issues associated with scientific research, institutional responsibilities of scientists and critical skills for evaluation of ethical aspects of research.
- 7100. Qualitative Research: Analysis and Interpretation (3) Same as HLTH 7100, OCCT P: NURS 8235 or consent of instructor. Application and evaluation of qualitative research design and methods, including data collection, management, and analysis approaches, and the art and science of interpretation.
- 7270. Introduction to Historical Nursing Research (3)
 Uses historical analysis to understand development of nursing.
- 7271. Complementary and Alternative Therapies in Nursing Practice (3)
 - P: Consent of chair. Evaluates the integration of complementary and alternative therapies into nursing care.
- 7272. American Nursing Traditions of the Eighteenth and Nineteenth Centuries (3) Nursing history and traditions, with a focus on the art of constructing caring communities, and the science of creating healing environments.
- 7440. Current Issues in Nursing Leadership (3)
 - P: Graduate admission. Integration of leadership principles through in-depth exploration of current issues in community health.
- 7445. Board Involvement of Nurse Leaders (3)
 - P: Admission to the graduate program or consent of instructor. Focus on skills, roles, liability, and responsibilities of serving on health care governing boards.
- 8006. Selected Topics (1,2,3)
 - May be repeated for a maximum of 6 s.h. P: Consent of program director. Current issues in nursing science and nurse scientist roles.
- 8220. Philosophy of Science (3)
 - P: Admission to the PhD in nursing program or consent of program director. Examines nature and evolution of philosophic bases of nursing science and practice.

IV. College of Nursing

http://www.ecu.edu/cs-acad/grcat/coursesNURS.cfm

NURS: Nursing

- 5620. International Health Care (3)
 - P: Graduate status or senior by consent of instructor. Issues, philosophy, and cultural differences in health care from international perspective. Compares US healthcare to that in other nations.
- 6001. Philosophical Perspectives and Theoretical Bases of Advanced Nursing Practice (3)
 P: Graduate student status or consent of instructor. Examines philosophical perspectives, theories, and concepts from nursing and related fields that relate to advanced nursing practice.
- 6002. Advanced Nursing Practice in Complex Health Care Organizations (3)
 P: Graduate status or consent of instructor. Examines political, legal, and economic influences on health care organizations, advanced nursing practice, and quality of care.

- 6006. Selected Topics (1,2,3)
 - May be repeated for a maximum of 6 s.h. P: Consent of instructor. Current issues and trends in nursing and health care.
- 6007. Health Appraisal of Individuals, Families, and Communities (6)
 P: Admission to alternate entry MSN: Phase I pre-licensure. Provides knowledge and

skills to conduct a comprehensive, holistic, and theory-based health appraisal of individuals within context of families and communities.

6008. Professional Nursing Foundations (6)

P: Admission to alternate entry MSN: Phase I pre licensure program in nursing. Provides knowledge and skills related to physiological challenges, including principles of pharmacological and nursing interventions.

- 6013. Dimensions of Professional Nursing Practice (3)
 - P: Admission to alternate entry MSN: Phase I, or consent of instructor. Considers historical and contemporary issues affecting theoretical, philosophical, and scientific basis of professional nursing practice.
- 6016. Comprehensive Care of Individuals Experiencing Alterations In Health I (7) P: NURS 6007, 6008, 6013 or consent of instructor. Provides theoretical foundations and clinical experiences in providing nursing care to individuals experiencing selected alterations in health throughout life span.
- 6017. Comprehensive Care of Individuals Experiencing Alteration In Health II (7)
 P: NURS 6016 or consent of instructor. Provides theoretical foundations and clinical experiences in providing nursing care to individuals experiencing selected alterations in health throughout life span.
- 6018. Clinical Capstone (5)
 - P: NURS 6017. Directed nursing practice in identified area of interest based on application of previous learning.
- 6019. Leadership and Community Service Learning (5)
 - P: NURS 6018 or consent of instructor. Integrates principles of nursing leadership/management and population focused community health nursing, including service learning experience.
- 6024. Simulation in Nursing Education (3)
 - P: NURS 6904 or consent of instructor. Introduces the use of human and virtual patient simulation as an instructional strategy in nursing education.
- 6035. Interdisciplinary Rural Health (3)
 - Theoretical base and skills for interdisciplinary rural health practice.
- 6050. Human Physiology and Pathophysiology for Advanced Nursing Practice (3)
 - P: Admission to NURS graduate program or consent of instructor. In-depth analysis of normal physiological processes across life span. Focus on pathophysiology and critical analysis for student's area of study. Emphasis on correlation of concepts with clinical manifestations.
- 6070. Globalization and Health Care (3)
 - Exploration of interdisciplinary issues, activities and impact of globalization on world health.
- 6109. Introductory Nurse Midwifery Professional Roles and Issues (2) Historical, theoretical, and scientific foundations of nurse midwifery.
- 6110. Reproductive Physiology (2)

- P: NURS 6050 or consent of instructor. Underlying biologic principles and concepts related to human reproductive cycle, genetics, maternal-fetal-placental unit, and neonate.
- 6112. Nurse-Midwifery Management: Well Women Care (3)
 P: NURS 6110; admission to nurse-midwifery concentration. Focuses on American College of Nurse Midwives (ACNM) core competencies for promoting health in essentially healthy women. Supervised on-site practicum by clinical preceptor.
- 6113. Nurse-Midwifery Management: Antepartal Care (4)
 P: NURS 6110, 6112. Focuses on ACNM core competencies for promoting health in essentially healthy women and their families during the antepartal period including management of antepartal complications. Supervised on-site practicum by clinical preceptor.
- 6115. Nurse-Midwifery Management: Intrapartal Care (4)
 C: NURS 6116. Focuses on ACNM core competencies for promoting health in essentially healthy women during labor and birth including management of intrapartal complications. Supervised on-site practicum by clinical preceptor.
- 6116. Nurse-Midwifery Management: Postpartal Care and Neonatal Care (3)

 C: NURS 6115. Focuses on ACNM core competencies for promoting health in essentially healthy neonates and women during the puerperium including management of postpartum and neonatal complications. Supervised on-site practicum by clinical preceptor.
- 6117. Nurse-Midwifery Management: Integration Practicum (7)
 P: NURS 6115, 6116. Comprehensive nursemidwifery management of neonates and healthy women throughout their lifespan.
- 6118. Integration of Nurse-Midwifery Professional Roles and Issues (2)
 P: NURS 6115, 6116. Roles and responsibilities of professional nurse midwifery.
- 6119. Nurse-Midwifery Management: Introduction to Primary Care for Well Women (2) P or C: NURS 6610; admission to nurse midwifery concentration. Focuses on American College of Nurse Midwives (ACNM) core competencies for primary care in essentially healthy women. Supervised on-site practicum by clinical preceptor.
- 6208. Concepts of Health Promotion and Disease Prevention for Advanced Nursing Practice (3) P: Admission to nursing graduate program or consent of instructor. Role of advanced practice nurse in health promotion and primary prevention.
- 6214. Chronic Health Problems: Concepts and Theories for Advanced Nursing Practice (3) P: NURS 6001 and 6208 or consent of instructor. Focuses on knowledge, theory, and research relevant to chronically ill adults in acute care settings.
- 6224. Acute Health Problems: Concepts and Theories for Advanced Nursing Practice (3) Focuses on knowledge, theory, and research relevant to adult clients experiencing acute health problems.
- 6310. Advanced Community Health Nursing I (3)
 P: NURS 6001, 6002, 6991, or consent of instructor. Examines the role of the community health nurse leader in the application of program planning models to assess the health status of communities or populations and develop health care programs.
- 6311. Advanced Community Health Nursing II (3)

 Examines the leadership role of the community health nurse in planning and directing the implementation and evaluation of interdisciplinary, community based health care programs.

- 6417. Development Physiology for Advanced Neonatal and Pediatric (3)
 P: Admission to NURS graduate program or consent of instructor. Developmental changes in morphological processes and normal and abnormal physiology in humans from conception through adolescence.
- 6418. Health Assessment for Advanced Nursing Practice of Neonatal and Pediatric Patients (3) For advanced practice nurse. P: Admission to NURS graduate program or consent of instructor. Comprehensive assessment of neonatal and pediatric clients using diagnostic reasoning process.
- 6419. Clinical Pharmacology for Advanced Neonatal and Pediatric Nursing Practice (3)
 P: Admission to NURS graduate program or consent of instructor. Pharmacological knowledge basic to assessment and management skills for advanced clinical nursing practice related to newborns and pediatric patients with common acute and chronic health problems.
- 6420. Advanced Neonatal Nursing: Research and Theory I (3)
 P: NURS 6417, 6418. Focuses on management of the prenatal and postnatal environments, anticipated health problems experienced by infants and implications for the infants and their families.
- 6421. Advanced Neonatal Nursing Practicum I (2)
 P/C: NURS 6420. Provides intensive neonatal clinical experiences for neonatal nurse practitioner students.
- 6422. Advanced Neonatal Nursing: Research and Theory II (3)
 P: NURS 6420. Focuses on neonatal nurse practitioner management of disorders of organ systems.
- 6423. Advanced Neonatal Nursing Practicum II (4)
 P/C: NURS 6422. Provides intensive clinical experiences for neonatal nurse practitioner students.
- 6424. Advanced Neonatal Nursing: Research and Theory III (3)
 P: NURS 6422. Focuses on the integration of advanced knowledge to care for the infant and the family.
- 6425. Advanced Neonatal Nursing Practicum III (5)
 P/C: NURS 6424. Provides intensive clinical experiences for neonatal nurse practitioner students.
- 6500. Independent Study in Nursing (1,2,3)

 May be repeated for a maximum of 9 s.h. P: Consent of advisor. Nontraditional, faculty-approved projects relating to clinical and functional areas of study.
- 6610. Health Assessment for Advanced Nursing Practice (3)
 P: Admission to NURS graduate program or consent of instructor. Advanced assessment, critical thinking, and decision-making skills essential to evaluation of health status, health risks, illnesses, and functional/dysfunctional health patterns of individuals and family members throughout life span.
- 6611. Clinical Pharmacology for Advanced Nursing Practice (3)
 P: Admission to NURS graduate program or consent of instructor. In-depth presentation of pharmacologic principles to manage pharmacologic agents safely and effectively. Specialty labs address specific applications.
- 6612. Advanced Nursing Practice with Families in Primary Health Care (3)

- P: Admission to FNP concentration or consent of concentration director. Advanced practice psycho social/cultural context for interpretation of family patterns and processes by using family systems theory.
- 6613. Advanced Nurse Practitioner Role Development (2)
 P: Admission to FNP concentration; NURS 6614, 6615, 6616, 6617, 6618, or consent of instructor. Leadership role within health care delivery system, nursing profession, and society.
- 6614. Advanced Practice Nursing with Families: Primary Care of Adults (4)
 P: Admission to FNP concentration; NURS 6610, 6611, or consent of concentration director. Theoretical, scientific, and contemporary knowledge base to provide a framework for assessment and management of primary health care needs of culturally diverse families with young and middle-aged adults.
- 6615. Advanced Practice Nursing with Families: Reproductive Health Care Adolescent and Adult Reproductive Healthcare (2)
 - P: Admission to <u>ANP or FNP concentration</u>; NURS 6610, 6611, C: NURS 6614 or consent of concentration director. Theoretical, scientific, and contemporary knowledge base to provide a framework for assessment and management of primary health care needs of culturally diverse families with reproductive health care needs. <u>Advanced theory and management related to reproductive health promotion, prevention of illness, and common acute episodic and stable chronic illnesses in culturally diverse populations.</u>
- 6616. Advanced Practice Nursing with Families: Childbearing Clients (1)
 P: Admission to FNP concentration; NURS 6614, 6615, or consent of concentration director. Theoretical, scientific, and contemporary knowledge base to provide a framework for assessment and management of primary health care needs of culturally diverse families with childbearing members.
- 6617. Advanced Practice Nursing with Families: Primary Care of Infants, Children, and Adolescents (4)
 - P: Admission to FNP concentration; NURS 6614, 6615, of consent of concentration director. Theoretical, scientific, and contemporary knowledge base to provide a framework for assessment and management of primary health care needs of culturally diverse families with infants, children and adolescents.
- 6618. Advanced Practice Nursing Practicum: Primary Care of Adults (4)
 P: Admission to FNP concentration; P or C: NURS 6614, 6615, or consent of concentration director. Demonstrate competencies in provision health care to adult clients in culturally diverse families. The student practices under the direct supervision by onsite clinical preceptors.
- 6619. Advanced Practice Nursing Practicum: Primary Care of Childbearing and Childrearing Families (4)
 P: Admission to FNP concentration; NURS 6614, 6615; P or C: NURS 6616, 6617 or consent of concentration director. Demonstrate competencies in provision of primary health care to culturally diverse childbearing and childrearing families. The student

practices under the direct supervision of on-site clinical preceptors.

6620. Advanced Practice Nursing Practicum: Synthesis in Primary Care of Families (5)
P: Admission to FNP concentration; NURS 6619 or consent of concentration director.
Clinical synthesis experience across the lifespan for family nurse practitioner students.
The student practices under the direct supervision of on site clinical preceptors.

- 6621. Advanced Practice Nursing: Care of Adults With Acute and Chronic Illness Care of Older
 Adults (3)
 - P: NURS 6610, 6611, 6614, 6615 or consent of concentration director. Theoretical, scientific, and contemporary knowledge base to provide a framework for assessment and management of health care needs of culturally diverse, older adults with acute and/or chronic illness.
- 6622. Advanced Practice Nursing Practicum: Care of Adults with Acute with Acute and Chronic Illness Care of Older Adults with Acute and Chronic Illness Practicum (3)
 P: NURS 6614, 6615, 6618; C: NURS 6621 or Consent of concentration director.
 Demonstrates competencies in providing health care to culturally diverse older adult clients with acute and chronic illnesses. The student practices under the direct supervision of on-site clinical preceptors. Supervised on-site practicum by clinical preceptor.
- 6623. Advanced Practice Nursing Practicum: Specialty Care of Adults

 Practicum (4)
 - P: NURS 6622 or consent of concentration director. Demonstrates competencies in providing health care to culturally diverse adult clients with complex illnesses in a selected population. The student practices under the direct supervision of on site clinical preceptors.—Supervised on-site practicum by clinical preceptor.
- 6805. Advanced Pharmacology for Nurse Anesthesia I (3)
 P: Admission to nurse anesthesia concentration; C: NURS 6813. Survey of pharmacodynamics, pharmacokinetics, adverse effects and pharmacotherapeutic principles of anesthesia, antimicrobial, antieoplastic, endocrine, and other therapeutic agents.
- 6806. Advanced Pharmacology for Nurse Anesthetists II (4)
 P: NURS 6814, 6817; PTHE 7002; C: NURS 6811, 6819. Surveys pharmacodynamics, pharmacokinetics, adverse effects, and pharmacotherapeutic principles of drugs affecting the autonomic, cardiovascular, respiratory, renal, and central nervous systems.
- 6810. Human Physiology for Nurse Anesthetists (5)
 P: Admission to nurse anesthesia concentration; C: NURS 6805, 6813. In-depth analysis of normal processes across the lifespan. Provides physiological basis for practice with emphasis on correlation of these concepts with clinical manifestations.
- 6811. Anesthesia Pharmacology (3)
 P: NURS 6814, 6817; PTHE 7002; C: NURS 6806. Chemical and physical principles involved in administration of anesthesia, including uptake and distribution, and toxicology of anesthetic drugs and agents.
- 6812. Professional Aspects of Nurse Anesthesia (2)
 P: NURS 6822, 6824; C: NURS 6823. Historic, legal, ethical, and international issues important to contemporary nurse anesthesia practice.
- 6813. Chemistry and Physics of Anesthesia (4)
 P: Admission to nurse anesthesia concentration; C: NURS 6805. Aspects of chemistry, biochemistry, and physics applicable to human and mechanical systems involved in delivering safe anesthesia care.
- 6814. Basic Principles of Nurse Anesthesia (3)
 P: Admission to nurse anesthesia concentration; NURS 6805, 6810; C: NURS 6717;
 PTHE 7002. Fundamentals of anesthesia practice, including basic techniques, procedures for administering anesthesia, assessment of patient status, and case management.

- 6815. Advanced Principles of Nurse Anesthesia I (2)
 - P: Admission to nurse anesthesia concentration; NURS 6806, 6811, 6819; C: NURS 6820. Anesthesia concepts for increasingly complex patients with alterations in one or more organ system. Includes principles of increasingly advanced surgical and radiological procedures.
- 6816. Advanced Principles of Nurse Anesthesia II (2)
 - P: Admission to nurse anesthesia concentration; NURS 6815, 6820; C: NURS 6818, 6821. Advanced principles of cardiothoracic and vascular anesthesia, infection control, trauma anesthesia, and management of the patient with acute and chronic endocrine disease.
- 6817. Clinical Correlations I (1)
 - P: Admission to nurse anesthesia concentration; NURS 6805, 6810, 6813; C: NURS 6814; PTHE 7002. Links anesthesia-related information with specific topics in anatomy. Explores regional anesthesia.
- 6818. Clinical Correlations II (1)
 - P: Admission to the nurse anesthesia concentration, NURS 6815, 6820. Links research and advanced principles courses examining research in obstetrics, pediatrics, cardiothoracic and neurosurgical anesthesia.
- 6819. Clinical Practicum in Nurse Anesthesia I (1)
 - P: Admission to nurse anesthesia concentration; NURS 6814, 6817; C: NURS 6806, 6811. Introduces clinical practice in operating room environment, including basic skills such as monitoring, preoperative assessment, positioning, induction agents, and sequence and airway management.
- 6820. Clinical Practicum in Nurse Anesthesia II (3)
 - P: Admission to nurse anesthesia concentration; NURS 6806, 6811, 6819; C: NURS 6815. Defines physiological, pharmacological, and biochemical concepts in beginning application of anesthesia principles.
- 6821. Clinical Practicum in Nurse Anesthesia III (4)
 - P: Admission to nurse anesthesia concentration; NURS 6820; C: NURS 6816, 6818. Explores physiological, pharmacological, and biochemical concepts in complex clinical application of anesthesia principles.
- 6822. Clinical Practicum in Nurse Anesthesia IV (4)
 - P: Admission to nurse anesthesia concentration; NURS 6818, 6821; C: NURS 6824. Advanced clinical applications regarding anesthetic preparation, anesthesia equipment setup, airway management, anesthetic management, patient monitoring, and regional anesthesia.
- 6823. Clinical Practicum in Nurse Anesthesia V (4)
 - P: Admission to nurse anesthesia concentration; NURS 6822; C: NURS 6812. Advanced clinical practice utilizing all anesthesia principles to provide independent responsibility for patient care.
- 6824. Advanced Principles of Nurse Anesthesia III (2)
 - P: Admission to nurse anesthesia concentration; NURS 6816, 6818, 6821; C: NURS 6822. Advanced concepts of anesthetic management. Emphasis on renal, endocrine, pediatric, and obstetric cases, regional anesthesia, and chronic pain management.
- 6903. Curriculum Development in Nursing (3) Formerly NURS 6400

- Foundations, principles, and contemporary issues related to curriculum development in nursing education.
- 6904. Educational Concepts, Theories, and Strategies in Nursing (3)
 P/C: NURS 6903 or consent of instructor. Explores learning theories and educational strategies used by nurse educators.
- 6905. Nursing Education Role Practicum I (3)
 P: NURS 6904 or consent of instructor; P/C: NURS 6909 or consent of instructor.
 Guided practicum with nurse educators in academic and health care settings.
- 6908. Nursing Education Role Practicum II (3)
 P: NURS 6905 or consent of instructor. Collaborative implementation and evaluation of comprehensive educational project.
- 6909. Evaluation in Nursing Education (3)
 P: NURS 6903 or consent of instructor. P/C: NURS 6904 or consent of instructor.
 Focuses on evaluation of students, faculty, curricula, and programs in nursing education.
- 6959. Clinical Nurse Specialist Theory and Role Development (3)
 P: NURS 6001, 6002 and at least one of the following: NURS 6050, 6610, 6611, or 6208; or consent of Director of Clinical Nurse Specialist Concentration. Focuses on the core competencies, essential characteristics, and the conceptual model guiding CNS practice.
- 6960. Clinical Nurse Specialist Practicum I (3)
 P: NURS 6959 or consent of Director of Clinical Nurse Specialist Concentration. Applies
 CNS knowledge and skills to specialty clinical practice. Students under direct supervision
 of on-site clinical preceptors.
- 6961. Clinical Nurse Specialist Practicum II (3)
 P: NURS 6959, 6960; by consent of faculty. Applies CNS knowledge and skills to specialty clinical practice. Students practice with increasing independence under supervision of on-site clinical preceptors.
- 6962. Clinical Nurse Specialist Practicum III (3)
 P: NURS 6959, 6960, 6961; by consent of faculty. Applies CNS knowledge and sills to specialty clinical practice. Students practice with increasing independence and with minimal consultation and collaboration with preceptor.
- 6971. Health Policy, Law, and Regulation (3) Same as COHE 6971 and PADM 6400 P/C: NURS 6001, 6002, 6983. Overview of health policy, law and regulation which relate to the delivery of health care in the United States.
- 6973. Management of Human Resources and Professional Relationships in Health Systems (3) P/C: NURS 6001, 6002; or consent of instructor. Focuses on the theoretical, legal/ethical, and practical dimensions of human resources management in health systems.
- 6974. Financial Management and Decision-making in Nursing Leadership (3)
 P/C: NURS 6992 or consent of instructor. Focuses on practical applications of financial concepts in making nursing decisions and accomplishing service delivery goals in the current health system.
- 6977. Nursing Leadership Practicum I (3)
 P/C: NURS 6983, 6992 or consent of instructor. Application of organizational and administrative theory, ethics, and clinical service and outcome management concepts within nursing and health systems.
- 6978. Nursing Leadership Practicum II (4)

- P/C: NURS 6977 or consent of instructor. Application of organizational and administrative theory within nursing and health systems in a selected focus area.
- 6983. Administrative and Organizational Theory and Ethics: Applications in Nursing and Health Systems (3)
 - P/C: NURS 6001, 6002, 6986, or consent of instructor. Examines organizational, administrative, and ethical theory that relate to the leadership of nursing and health systems.
- 6984. Informatics for Advanced Nursing Practice (3)
 Application of informatics systems to practice, research, education, and administration of nursing.
- 6985. Management of Clinical Services Delivery and Outcomes (3)
 P/C: NURS 6001, 6002, 6992, or consent of the instructor. Explores the elements of nursing leadership in health systems essential to planning, organizing, staffing, directing, and evaluating patient care delivery outcomes.
- 6986. Analytical Foundations of Nursing Leadership (1)
 P: Admission to the MSN or consent of instructor. Examines the process, theories and principles of leadership; analyzes student leadership strengths and challenges through self-evaluation and team reflection.
- 6987. Budgeting and Decision Making in Healthcare (3)
 P: Admission to the MSN or consent of instructor. Practical skills in budgeting.
- 6991. Research Methods for Advanced Nursing (3) Formerly NURS 6994
 P: Graduate student status or consent of instructor. Research methods and design as basis for clinical and organizational decision making and scientific inquiry. Quantitative and qualitative research methodology and development of biopsychosocial approaches to study of phenomena.
- 6992. Research Utilization Seminar (2) Formerly NURS 6003
 P: NURS 6001, 6002, 6991. Focuses on knowledge and skill competencies basic to use of research findings in advanced nursing practice.
- 6993. Advanced Nursing Synthesis (1)
 - P: Consent of graduate advisor. Seminar for synthesis of graduate nursing concepts.
- 7000. Thesis (1-6)
 - May be repeated. May count maximum of 3 s.h.
- 7001. Thesis: Summer Research (1)
 - May be repeated. No credit may count toward degree. Students conducting thesis research may only register for this course during the summer.
- 7003. Health Disparities/Inequities Research (3)
 P: Admission to the PhD in nursing program or consent of instructor. Exploration and design of strategies to address health disparities/inequities.
- 7004. Research Ethics for a Complex World (2) Same as HUMS 7004 and GRAD 7004 Concerned with issues associated with scientific research, institutional responsibilities of scientists and critical skills for evaluation of ethical aspects of research.
- 7100. Qualitative Research: Analysis and Interpretation (3) Same as HLTH 7100, OCCT 7100 P: NURS 8235 or consent of instructor. Application and evaluation of qualitative research design and methods, including data collection, management, and analysis approaches, and the art and science of interpretation.
- 7270. Introduction to Historical Nursing Research (3)

Uses historical analysis to understand development of nursing.

- 7271. Complementary and Alternative Therapies in Nursing Practice (3)
 - P: Consent of chair. Evaluates the integration of complementary and alternative therapies into nursing care.
- 7272. American Nursing Traditions of the Eighteenth and Nineteenth Centuries (3) Nursing history and traditions, with a focus on the art of constructing caring communities, and the science of creating healing environments.
- 7440. Current Issues in Nursing Leadership (3)
 - P: Graduate admission. Integration of leadership principles through in-depth exploration of current issues in community health.
- 8006. Selected Topics (1,2,3)
 - May be repeated for a maximum of 6 s.h. P: Consent of program director. Current issues in nursing science and nurse scientist roles.
- 8220. Philosophy of Science (3)
 - P: Admission to the PhD in nursing program or consent of program director. Examines nature and evolution of philosophic bases of nursing science and practice.
- 8225. Development of Nursing Knowledge (3)
 - P: NURS 8220 or consent of program director. Considers inductive and deductive approaches to theory development. Integrates relationships among research, theory, and knowledge development.
- 8226. Statistical Methods for Nursing Research I (3)
 - P: Admission to the PhD in nursing program or consent of program director. Examines use of statistics for descriptive purpose, testing proposed relationships, predictions, and determining causality.
- 8227. Statistical Methods for Nursing Research II (3)
 - P: NURS 8226 or consent of program director. Examines multivariate statistical methods including multivariate analysis of variance, exploratory and confirmatory factor analysis, path analysis, and structural equation modeling.
- 8235. Qualitative Methods (3)
 - P: NURS 8225 or consent of program director. Considers assumptions, principles, methods, and outcomes through analysis of variety of qualitative approaches to research.
- 8240. Quantitative Methods (3)
 - P: NURS 8227 or consent of program director. Considers assumptions, principles, methods, and outcomes through analysis of a variety of quantitative approaches to research.
- 8241. Instrumentation and Measurement (3)
 - P: NURS 8240 or consent of program director. Examines processes involved in designing, testing, and selecting instruments and other devices for measurement of nursing phenomena.
- 8255. Directed Research (1,2,3)
 - May be repeated. Minimum 7 s.h. is required; maximum 12 s.h. may count. P: NURS 8235 and/or NURS 8240 or consent of program director. Mentorship and interdisciplinary research experience under guidance of nursing faculty member.
- 8260. State of Clinical Nursing Science (3)
 - P: NURS 8235 and 8240 or consent of program director. Focuses on selected domains of knowledge relevant to clinical nursing science.

- 8265. Evolving Clinical Nursing Science (3)
 - P: NURS 8260 or consent of program director. Formulate approaches to implement identified directions for knowledge development in clinical nursing science.
- 8500. Independent Study (1-3)
 - May be repeated. May count a maximum of 6 s.h. P: Consent of instructor. Independent exploration of area(s) of interest in nursing science.
- 9000. Dissertation Research (3-12)
 - May be repeated. Minimum of 6 s.h. required; maximum of 12 s.h. may count. P: Successful completion of candidacy examination. Original research investigation on a significant aspect of nursing science.
- 9001. Dissertation: Summer Research (1)
 - May be repeated. No credit may count toward degree. Students conducting dissertation research may only register for this course during the summer.

V. Thomas Harriot College of Arts and Sciences

Department of Geological Sciences

http://www.ecu.edu/cs-acad/grcat/coursesgeol.cfm

GEOL: Geological Sciences

- **6900. Preparation of Geological Manuscripts (3)** P: Consent of instructor. Emphasis on grammatical style, syntax, and organization of manuscripts. Supplementary exercises develop skills in preparing illustrations (computer graphics, drafting, photographic techniques). Steps of publication process presented in detail.
- **6950. Geological Data Analysis (3,0)** 2 lectures and 1 3-hour lab per week. P: Graduate standing in GEOL or consent of instructor. Discusses and implements various methods of geological data analysis. Emphasis on methods most applicable to research topics in geology. Topics include data collection and project design, box models, and uni- and multi-variate analysis of geological data, and time-series analysis.
- **6998. Research Project (3)** May be repeated once. May count a maximum of 3 s.h. P: Non-thesis GEOL major; consent of advisor. Formulate research project demonstrating principles and procedures used to recognize, state, solve, and write problems of geological importance. Requires formal seminar presentation of completed project and paper.
- **7000.** Thesis (1-6) May be repeated. May count a maximum of 6 s.h.
- **7001. Thesis: Summer Research (1)** May be repeated. No credit may count toward degree. Students conducting thesis research may only register for this course during summer.
- **7002. Coastal Geoscience (4)** P: Consent of instructor. For PhD students and natural science MS students. Fundamental concepts of geological and physical oceanographic principles of coastal systems.
- **7007. Special Topics in Coastal Research and Methodology (1,2,3)** May be repeated for a maximum of 6 s.h. P: Consent of instructor. Emerging and specialized research techniques and methodologies for coastal studies.

- **7008.** Directed Studies in Geology (1,2,3) May be repeated for a maximum of 9 s.h. P: Consent of instructor. Independent study on selected topic. May include field work, lab work, directed readings, or some combination thereof.
- **7500.** Marine Isotope Geochemistry (3) P: CHEM 1150, 1151, 1160, 1161; or equivalent; or consent of instructor.

Fundamental principles behind the use of stable and radioactive isotopes, techniques of measurement, and a broad spectrum of marine-related research to which these nuclides are applied.

- 7600, 7601. Remote Sensing of Coastal Environments (4,0) 2 lectures and 1 lab per week. P: Consent of instructor. Application of optical remote sensing to examinations of material transport within and between coupled land ocean systems. Introduces image processing and analysis, integration of field measurement technologies and algorithm development. Emphasis is on the use of remote sensing as a research and decision-making tool.
- **7710, 7711. Groundwater Modeling (4,0)** 3 lectures and 1 lab per week. P: GEOL 5710, 5711; or consent of instructor. Numerical modeling course focusing on design and practical applications of groundwater models in hydrogeology. Students will learn principles and procedures for numerical modeling, building and running models, and assessing model results.
- **7830.** Principles of Biogeochemical Interactions (3) Formerly GEOL 6830 P: CHEM 1160. General introduction to life's effects on chemistry of Earth's surface. Examines interactions between atmosphere, land surface, and oceans. Stresses human impact on global environmental chemistry.
- **7910. Sediment Transport and Depositional Processes (4)** P: GEOL 4010; or consent of instructor. Examines processes involved in transport and deposition of sediment. Focus on fundamental principles and how they apply to active processes, recent sediment, and environmental applications.
- **7920, 7921.** Advanced Surface Water/Groundwater Hydrology (4,0) P: GEOL 5710, 5711; or consent of instructor. Advanced hydrologic topics with emphasis on computer applications and modeling. Evaluates steady-state and nonsteady-state models and applied aspects of hydrology related to management of water resources.
- **7930.** Biogeochemical Processes (4) Formerly GEOL 6930 P: CHEM 1160. Overview of life's effects on chemistry of Earth's surface. Examines interactions between atmosphere, land surface, and oceans. Biotic mechanisms in these habitats followed by synthesis of global cycles of biologically relevant elements (C, N, O, P, and S).
- 9000. Dissertation Research (3-12) May be repeated. May count a maximum of 12 s.h. per semester.
- **9001. Dissertation: Summer Research (1)** May be repeated. No credit may count toward degree. Students conducting dissertation research may only register for this course during the summer.

GEOL Banked Courses

5750, 5751. Introduction to Engineering 6230, 6231. Clay Mineralogy (3,0) Geology (3,0) 6340, 6341. Micropaleontology (3,0)