



Mary Jane Peitersen, Practice Consultant
Maryland Board of Nursing
4140 Patterson Ave.
Baltimore, MD 21215-2254
December 15, 1993

Dear Ms. Peitersen:

Attached is the information requested for approval of the Neonatal Nurse Practitioner (NNP) track at the University of Maryland School of Nursing (UMSN). The program contains 600 clinical hours, and the ratio of clinical to classroom hours is 2:1.

As you know, this is a new track is accepting NNP applicants at present. We anticipate that the first students will complete their program and graduate in December, 1994.

If you have further questions, please do not hesitate to call.

Sincerely,

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Assistant Professor

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410-706-5450

Attachments

RMC:ae

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**THE UNIVERSITY OF MARYLAND
SCHOOL OF NURSING**

Philosophy

Nursing is a dynamic and evolving practice discipline that is concerned with the promotion of health and with human responses to actual and potential health problems. Nursing goals include the promotion and protection of health, the prevention of illness, care of the suffering and ill, and the support for a peaceful death or loss.

Nursing occurs within the context of a caring relationship, the purpose of which is to assist individuals, families, groups, communities, and populations in a variety of settings to achieve optimal health and to make informed choices for their own well-being.

Nursing has a distinct body of knowledge which can and must be extended, verified, and revised using the methods of scholarly inquiry. It involves the selection, integration, and expansion of knowledge from nursing and other disciplines, including the social sciences, biological sciences, and humanities. This knowledge is applied to the understanding of health and illness and to the analysis and improvement of nursing practice.

Nursing is a research-based practice which uses empirical, ethical, personal and aesthetic perspectives in the application of the nursing process. Essential for the practice of nursing are knowledge, critical thinking, communication, interpersonal competence, leadership, management, teaching, psychomotor and analytic skills, and the use of current research, technology and information systems.

At all levels, the practice of professional nursing is based on a distinct body of knowledge and includes multiple responsibilities. These responsibilities include, but are not limited to, providing direct care, providing information for persons to make informed health care choices, facilitating persons to act on their own behalf, managing care, and applying research to practice. Advanced nursing practice consists of theoretically/conceptually based diagnostic reasoning and decision making strategies as the foundation for solving complex health care problems through a multiplicity of responsibilities. Advanced nursing practice is defined as specialty practice which is based on principles derived from relevant theory and research findings, and includes two interrelated spheres of activity: direct service to persons and indirect action carried out for the enhancement of direct nursing knowledge, health care systems and health policy.

Persons are holistic beings who have interactive dimensions. These dimensions are physical, psychological, spiritual, social, and cultural. The individual person has intrinsic worth and is entitled to respect. Persons have the right to seek and achieve optimal health, the right to make informed choices, and the responsibility for their own health care decisions. Persons are capable of reflecting upon their experiences. Their perceptions of these experiences along with their values and principles guide their health care decisions as well

as their interactions with others. Throughout their lifetime, persons grow and develop individually and within families, groups, communities, and populations.

Health is a multidimensional balanced expression of physical, psychological, developmental, spiritual, and social well-being. The expression of a person's health and/or illness is a reflection of the interaction of the person and the environment, and is expressed in human responses. Health is dynamic and uniquely defined and redefined by persons as they progress through their lifetime.

The environment is the context within which persons, families, groups, communities, and populations live and within which nurses practice. The context can be viewed from a variety of dimensions including physical, social, ethical, cultural, legal, spiritual, historical, economic, political, and organizational. These dimensions are discrete, interactive, and may change over time. Persons are in continuous and mutual interchange within their contextual dimensions. They bring experiences that can be valuable to developing a dynamic and quality environment. The dynamic interaction between persons and the environment affects their health and the achievement of well-being.

Learning is an active and lifelong process. Learning is facilitated through a reciprocal interaction between faculty and students, and occurs best within a caring and supportive environment where students are ultimately responsible for their learning. Differences among people necessitate various educational approaches.

Nursing education respects and builds upon the prior education and practice experiences of the learner. Nursing education at the baccalaureate level prepares professional nurses who are generalists and value life-long learning. Nursing education facilitates the development of students' empirical, ethical, aesthetic, and personal perspectives for the purpose of making and accepting responsibility for practice decisions. Baccalaureate education prepares nurses to participate in research, apply research findings to practice, and contribute to the development of the profession. Baccalaureate nursing programs are foundational for graduate study in nursing. Graduate education is characterized by an emphasis on specialization at the masters level, and a commitment to research and involvement in the development and refinement of knowledge at the doctoral level.

Conceptual Framework

The primary focus of the Master's curriculum is the discipline of nursing. The curriculum is designed to prepare students in specialized areas of advanced nursing practice, areas that are developed and have evolved in response to changing societal needs. The basic strands that run throughout the Master's curriculum are theory, research, and role specialization relevant to advanced nursing practice.

Theory: Theory from nursing and related disciplines serves as a foundation for practice, research, and role development within nursing.

Research: Research in nursing includes both applied and basic research. Nursing research explores and defines the knowledge necessary to provide direct and indirect nursing and health care. Theory development and refinement occur as results of research.

Role Specialization: Human responses are affected through various direct and indirect roles within organizations. Advanced professional nursing roles are based upon changing societal needs, sociopolitical trends, and health care delivery systems.

Purpose and Objective

The Master's program in nursing is formulated with the understanding that graduate education builds upon undergraduate education. Graduate education promotes an intensive and analytic expansion of knowledge, enabling the perception and development of new and more complex relationships that affect nursing practice. Graduate education provides further opportunity for the student to think conceptually and to apply theory and research to practice.

The purpose of the Master's program is to prepare nurses for advanced nursing practice and for entry into doctoral study.

The terminal objective of the Master's program is to prepare graduates who:

- Utilize theory and research from nursing and related disciplines as a basis for advanced nursing practice and scholarly inquiry.
- Demonstrate competence in a specialized area of nursing.
- Generate innovative and effective nursing actions for advanced nursing practice using the process of critical thinking.
- Collaborate with health care providers and consumers to achieve health care goals.
- Integrate legal and ethical dimensions of practice into professional nursing specialty roles.
- Assume responsibility for improving the delivery of health care and advancing the nursing profession.

In addition to the knowledge and practice components of the objectives listed above, the behavior of graduate students should reflect an internally consistent value system. Graduate students are expected to value scientific inquiry as a basis for professional practice and to seek to increase their contributions to the nursing profession.

Approval of Program by UMSN

The Master's Program Sub-committee of the Curriculum Committee unanimously approved the NNP track and the content of the five new clinical courses on October 26, 1992. Full

course syllabi were submitted and approved with minor revisions in terms of more specific evaluation criteria needed for theory requirements of second year clinical courses. The Curriculum Committee of the UMSN approved the NNP track and the five new courses (with one abstention) on November 9, 1992. The total faculty of the Department of Maternal and Child Health Nursing approved the NNP track and courses on November 16, 1992. The NNP track was approved at the campus level on May 10, 1993. There are currently eight neonatal students enrolled in the first clinical course.

Relationship of the Project to the Curriculum

The Neonatal Nurse Practitioner track is an expansion of the Perinatal/Neonatal Specialty track. The UMSN has one admissions process for all graduate students. Admission requirements include: baccalaureate degree from a program accredited by the National League for Nursing, minimum grade point average of 3.0 on a 4.0 scale (2.75-3.0 may be admitted provisionally), official scores on the Graduate Record Examination, course in elementary statistics, minimum of two years of NICU experience, three letters of reference, and a copy of a valid nursing license. Students in the Perinatal/Neonatal Specialty track complete 42-45 graduate credits for graduation with a master's degree. An overview of the graduate curriculum is presented below with specific courses taken by NNP students identified:

Core Courses (12 credits): All graduate nursing students, regardless of their area of concentration, take courses that focus on the clinical and theoretical bases for advanced nursing practice (NURS 602); organizational behavior and societal forces influencing health care delivery and professional practice (NURS 606); and theoretical and applied research skills, including statistical interpretation and use of computer programs (NURS 701, 702).

Specialty Track Courses (21 credits): There are five clinical courses which form the nucleus of the NNP track. They are taken in a specified sequence and build in complexity and specialization. In addition to an emphasis on advanced clinical practice expertise, three themes are developed within the sequence: the advanced practice/NNP role, research utilization, and primary care/developmental issues. Finally, health teaching and counseling are integral parts of the entire program.

The first clinical course, Advanced Nursing of the Childbearing Family and Neonate (4 credits), introduces the role of the NNP in the management of normal and high-risk families and infants. All Perinatal/Neonatal graduate students will take this course; there will be some differential breakout sessions for non-NNP majors. The focus of the course is to develop skills in physical and psychosocial assessment of childbearing families during all phases of the childbearing process: antenatal, intrapartal, post-partal, and the neonatal periods. Application of the advanced nursing role in improving outcomes and care of these families, particularly the family at risk, is discussed. During this course, students will have experience with Brazelton's Neonatal Behavioral Assessment Scale and Barnard's Nursing

Child Assessment Satellite Training scales (NCAST). Certification on the NCAST will be offered.

The second clinical course, Advanced Nursing of the High-Risk Neonate I (5 credits), develops the knowledge base and the skills necessary in caring for infants at risk. This course begins the four-course sequence taken only by NNP students. The emphasis in this course is the development of a physiologic basis of managing care of the high-risk neonate. The embryology, pathophysiology, and management of problems experienced by the high-risk neonate are presented in detail. Role development is continued as students explore the impact that the NNP has on improving services to high-risk infants and their families within the context of the neonatal intensive care unit (NICU).

The third clinical course, Advanced Nursing of the High-Risk Neonate II (3 credits), offers students the opportunity to begin to apply the material learned in the first two clinical courses in the NICU. While the second course provided the physiologic base for provision of care and the opportunity to develop skills, this third course enables students to participate in case management of high-risk infants and families. Clinical experiences provide students with the opportunity to integrate knowledge and skills in managing care of high-risk infants and families. Continuing focus on role development will also occur.

The fourth clinical course, Advanced Nursing of the High-Risk Neonate III (6 credits), is the final synthesis course in the clinical sequence. Students will continue to manage care of the high-risk neonate with an emphasis on developing collaborative relationships with other members of the health team. Experience with and certification in Als' Neonatal Individualized Developmental Care and Assessment Program (NIDCAP) will be offered during this course. Continuing discussion of the advanced practice role is also completed in this course. There will be some interface with non-Perinatal/Neonatal students during this course, especially regarding advanced practice role issues.

The fifth clinical course, Primary Care of the High-Risk Neonate (2 credits), which is taken in conjunction with Advanced Nursing of the High-Risk Neonate III, gives students the skills necessary to provide primary health care to high-risk infants after NICU discharge. The clinical component will include preparation for discharge, community resources, home visits, and experience in the ambulatory setting. Small group clinical seminars will focus on critical analysis of primary health care issues for the high-risk infant in the home and follow-up clinic.

Support Courses and Electives (11 credits): Neonatal students enroll in a neonatal physiology course (NPHY 630), a neonatal-pediatric pharmacology course (NURS 743), and a course focusing on theory and interventions for families in crisis, which also has a clinical component (NURS 755). Students may also choose from a variety of electives in genetics, embryology, ethics, intimate human behavior, and other maternal-child nursing topics. Students may also elect to complete a thesis, which requires three additional credits, for a total of 46 credits. The non-thesis option requires electives plus a scholarly paper/project

plus a comprehensive examination. Students must complete all requirements for the Master's degree within five years of study.

The following sections contain schedules for full and part-time study, descriptions of each course, a description of the relationship of the project to the ongoing curricula of the UMSN, an overview of the philosophy, conceptual framework, and terminal objectives of the Master's program at the UMSN.

**NEONATAL NURSE PRACTITIONER TRACK
WITHIN THE DEPARTMENT OF MATERNAL CHILD HEALTH NURSING**

Full Time Plan of Study

<u>Course No.</u>	<u>Course Title</u>	<u>Credits</u>
<u>SEMESTER 1</u>		
NURS 701	Research Designs & Analysis I	3
NURS 602	Critical Approaches to Nursing Theory	3
NPHY 630	Neonatal-Pediatric Physiology	3
NURS 639	Advanced Nursing of the Childbearing Family & Neonate	4
		12
<u>SEMESTER 2</u>		
NURS 702	Nursing Research Designs & Analysis II	3
NURS 606	Influential Forces in Nursing & Health	3
NURS 743	Neonatal-Pediatric Pharmacology	2
NURS 640	Advanced Nursing of the High-Risk Neonate I	5
		13
<u>SUMMER SESSION</u>		
NURS 740	Advanced Nursing of the High-Risk Neonate II	3
<u>SEMESTER 3</u>		
NURS 755	Families in Crisis	3
NURS 741	Advanced Nursing of the High-Risk Neonate III	6
NURS 742	Primary Care of the High-risk Neonate Seminar/Thesis	2 3
		14
TOTAL =		43

Part Time Plan of Study

<u>Course No.</u>	<u>Course Title</u>	<u>Credits</u>
<u>SEMESTER 1</u>		
NURS 701	Research Designs & Analysis I	3
NURS 602	Critical Approaches to Nursing Theory	3
		<hr/> 6
<u>SEMESTER 2</u>		
NURS 702	Nursing Research Designs & Analysis II	3
NURS 606	Influential Forces in Nursing & Health	3
		<hr/> 6
<u>SEMESTER 3</u>		
NPHY 630	Neonatal-Pediatric Physiology	3
NURS 639	Advanced Nursing of the Childbearing Family & Neonate	4
		<hr/> 7
<u>SEMESTER 4</u>		
NURS 743	Neonatal-Pediatric Pharmacology	2
NURS 640	Advanced Nursing of the High-Risk Neonate I	5
		<hr/> 7
<u>SUMMER SESSION</u>		
NURS 740	Advanced Nursing of the High-Risk Neonate II	3
<u>SEMESTER 5</u>		
NURS 741	Advanced Nursing of the High-Risk Neonate III	6
NURS 742	Primary Care of the High-risk Neonate	2
		<hr/> 8
<u>SEMESTER 6</u>		
NURS 755	Families in Crisis	3
	Seminar/Thesis	3
		<hr/> 6
TOTAL =		43

Didactic and Clinical Hours

Course	Didactic (hours/semester)	Clinical (hours/semester)
NURS 639: Advanced Nursing of the Childbearing Family and Neonate	30	90
NURS 640: Nursing Care of the High-Risk Neonate I	45	90
NURS 740: Nursing Care of the High-Risk Neonate II	8	150
NURS 741: Nursing Care of the High-Risk Neonate III	15	225
NURS 742: Primary Care of the High-Risk Neonate	15	45
NURS 755: Families in Crisis	45	15
TOTALS	158	615

Course Syllabi

Course Number: NURS 639
Course Title: Advanced Nursing of the Childbearing Family and Neonate
Course Placement: Fall Semester
Credits: 4 - 2 hours class = 2 credits
6 hours clinical = 2 credits

Faculty

Dr. Linda S. Thompson
Dr. Regina M. Cusson
Mr. Arthur J. Engler

Course Description

The purpose of this first clinical course is to introduce the role of the neonatal nurse practitioner/clinician in the management of normal and high-risk families and infants. The focus of the course is to develop skills in physical and psychosocial assessment of childbearing families during all phases of the childbearing process: antenatal, intrapartal, postpartal, and neonatal periods. Special emphasis will be placed on events during the antenatal, intrapartal, and postpartal periods that impact on the neonate and on application of the advanced nursing role in improving outcomes and care of these families, particularly the family at risk. Clinical supervision will be provided by preceptors from the clinical placement sites, either master's-prepared NNPs or neonatologists. In addition, program faculty will conduct site visits at regular intervals throughout the program, students will present cases regularly, and students and faculty will evaluate achievement of clinical competence by means of a clinical log kept by students and a Clinical Evaluation Tool (CET) completed by both faculty and student. The CET is all-inclusive and will allow students to track their progress throughout the program; an abbreviated version for use by clinical preceptors is being developed.

Course Objectives

At the completion of the course, the student will be able to:

1. Analyze the effect of the maternal, antenatal, and intrapartal experience on the neonate.
2. Differentiate problems experienced by the normal vs. the high-risk childbearing family.

3. Develop a knowledge base that includes specified concepts and assessment strategies needed in caring for the childbearing family and neonate.
4. Demonstrate competency in physical and behavioral assessment of the normal and high-risk neonate.
5. Analyze the utilization of advanced practice roles in nursing of childbearing families and neonates.

Course Requirements

This class will meet once a week for a two hour-session of lecture and discussion. In addition, clinical practice will consist of six hours a week arranged by the faculty. The student will utilize the obstetrical service of the clinical agency to meet clinical requirements. In addition, introduction to the advanced practice role will include precepted experiences with advanced practitioners in the clinical setting.

Evaluation

1. Evaluation of the mastery of the didactic portion of the course will be based on a final exam and a role paper.

Course: Clinical evaluation will be based on the mastery of clinical competencies, and clinical rounds. Evaluation conference at mid-term or other times as appropriate will be provided by course faculty.

2. **Criteria for Final Grade (see attached guidelines):**

Final Exam	25%
Concept Paper	15%
Mastery of Clinical Competencies	30%
Clinical Rounds: Perinatal	15%
Clinical Rounds: Neonatal	15%

	100%

FINAL EXAM

1. This will be a take-home exam.
2. The exam will consist of three case management problems, of which the student will choose two to which to respond.

Course Content Outline

DATE	TOPIC	ASSIGNMENTS
Sept. 8	Course Introduction and Overview	
Sept. 15	Antenatal Assessment	
Sept. 22	Risk Assessment During Pregnancy	
Sept. 29	Intrapartum Assessment I	
Oct. 6	Intrapartum Assessment II	Concept paper outline and references due
Oct. 13	Postpartum Care of the Family	
Oct. 20	Perinatal Rounds	
Oct. 27	Neonatal Transition	
Nov. 3	Physical Assessment of the Normal Neonate	
Nov. 10	Physical Assessment of the High-Risk Neonate	Take-home final exam distributed
Nov. 17	Behavioral Assessment of the Normal and High-Risk Neonate	Concept paper due
Nov. 24	NO CLASS	
Dec. 1	Advanced Practice Role I	
Dec. 8	Advanced Practice Role II	Take-home final exam due
Dec. 15	Neonatal Rounds	

CLINICAL OBJECTIVES AND COMPETENCIES

Antepartum objectives

Upon completion of this course, students will be able to:

1. Evaluate the completeness of the prenatal history recorded in the chart.
2. Identify the normal physiological changes that occur during each trimester of pregnancy.
3. Identify maternal and fetal physical assessment necessary to evaluate the progress of the client's pregnancy. Students should consider the value of:
 - a. Maternal physical exams
 - b. Fetal growth assessments (e.g., ultrasound, fundal height, etc.)
 - c. Biophysical profiles
 - d. Evaluation of fetal monitor tracings
 - e. Evaluation of appropriate laboratory evaluations (e.g., blood glucose determination)
4. Assess the effect of the physical and emotional status of the antenatal client on the neonate in the normal and the complicated pregnancy.

Intrapartum objectives

Upon completion of this course, students will be able to:

1. Assess and manage the client's progress through the four stages of labor.
 - a. Perform physical assessment appropriate to each stage of labor
 - b. Recognize stages of labor and characteristics pertinent to each
 - c. Assess frequency, quality and duration of contractions
 - d. Recognize behavioral changes during the four stages of labor
 - e. Assess individual reactions to labor and delivery
 - f. Assess client's knowledge and childbirth preparation
 - g. Institute appropriate teaching as indicated
 - h. Teach clients breathing techniques where needed
 - i. Assist clients and support persons in using breathing techniques
2. Perform comfort and support measures for client throughout the four stages of labor -- positioning, mouth care, hydration, bladder care, general hygienic measures.
3. Assess and monitor effects of analgesics, anesthetics, and oxytocics, demonstrating:
 - a. Knowledge of more commonly used analgesics and anesthetics (epidural, general, caudal, pudendal)
 - b. Identification of side effects
 - c. Institution of nursing interventions as indicated
4. Assess fetal status throughout labor and make appropriate interventions.
5. Perform routine newborn assessment and care immediately after birth.
6. Facilitate integration of newborn into the family unit.

Postpartum objectives

Upon completion of this course, students will be able to:

1. Perform a physical assessment of the postpartum woman.
2. Assess physical discomforts, and advocate measures to ensure client's comfort (e.g., cramping, breast engorgement, episiotomy pain).
3. Perform an emotional assessment of the client's feelings and reactions to the birth experience and her preparedness for discharge.
4. Perform follow-up teaching appropriate to the individual client, e.g., newborn care, contraception, activity level upon discharge, changing family roles, nutritional needs, exercise and ambulation.
5. Assess psychosocial needs of client and family.
6. Assess integration of new child into family structure.

Normal newborn objectives

Upon completion of this course, students will be able to:

1. Assess the general physical status and behavioral state of the newborn.
2. Assess the gestational age of the newborn.
3. Assess the nutritional status and needs of the neonate.
4. Identify common deviations in the normal neonate and intervene appropriately.

High-risk neonate objectives

Upon completion of this course, students will be able to:

1. Discuss the impact of the neonatal intensive care environment upon the infant, family, and care giver.
2. Perform gestational age and physical assessment of the infant and discuss findings.
3. Assess the nutritional needs of the infant.
4. Recognize the signs and symptoms which may indicate neonatal abstinence syndrome and plan nursing intervention based on that assessment.

During clinical rounds, students will provide evidence of having achieved the following competencies:

Antepartum, intrapartum, and postpartum competencies

1. Performance of a complete assessment of the postpartum woman to include: Prenatal history; labor and delivery history; physical assessment and psychosocial assessment.
2. Evaluation of plan of care based on information gathered from above assessments.

- a. Identification of appropriate nursing diagnoses
- b. Identification of short and long term goals
- c. Identification of assessments related to nursing diagnoses
- d. Identification of appropriate interventions
- e. Evaluation of interventions

Newborn and high-risk neonate competencies

1. Performance of a newborn assessment to include: general physical status; behavioral state of the newborn, gestational age assessment and nutritional status.
2. Evaluation of plan of care based on information gathered from above assessments.
 - a. Identification of appropriate nursing diagnoses
 - b. Identification of short and long term goals
 - c. Identification of assessments related to nursing diagnoses
 - d. Identification of appropriate interventions
 - e. Evaluation of interventions

GUIDELINES FOR PERINATAL/NEONATAL CLINICAL ROUNDS

The purpose of this presentation is to afford each student the opportunity to present a case orally to the group as would be done on rounds in a clinical situation. There will be 20 minutes allotted per presentation so it will be necessary to be succinct and to focus appropriately on major problems. Choose one normal newborn/childbearing family for this assignment. The case may focus on antepartum, intrapartum, or postpartum/newborn periods in the perinatal continuum, however, all periods must be considered to provide a complete assessment.

Your presentation should include the following:

1. Review the prenatal course and intrapartum, and postpartum periods if applicable (see attached example).
2. Present the plan for a course of management for this client (a system's presentation is one example, a problem-oriented presentation is another).
3. Discuss nursing diagnoses related to 2-3 of the most important problems/issues, including assessment, interventions and rationale.
4. Discuss and evaluate interventions.
5. This presentation should prepare you for presentation on rounds in clinical site.

This assignment will comprise 15% of your grade.

You will be evaluated by faculty and peers (see clinical rounds evaluation form).

NOTE: It is recommended that you discuss possible cases with your instructor as early as possible.