



Nursing

Professional nurses provide direct care to individuals and work with others in a variety of settings to address the health needs of individuals, families, and communities. The practice of nursing aims to help people of all ages experience optimal health. Respect for human dignity and a commitment to caring are essential to nursing practice. Expectations of the baccalaureate Nursing graduate include professional growth and scholarly approaches to practice. The profession of nursing provides opportunities for graduates to assume many roles in a variety of clinical areas. A baccalaureate degree in Nursing also provides a foundation for graduate study and further specialization.

The baccalaureate degree program in nursing at Bemidji State University is accredited by the Commission on Collegiate Nursing Education, 655 K Street, NW, Suite 750, Washington, DC 20001, 202-887-6791. The program has two tracks, the RN to Baccalaureate Track and the 4-Year Track.

The **RN to Baccalaureate Track** serves registered nurses who live and work in various geographical areas. Courses are offered in block schedules, and some components are offered on the Internet and some on-campus. Students may enroll in liberal education courses and selected Nursing courses prior to being admitted to the Nursing major.

The **Pre-licensure Track** serves students who are entering Bemidji State University as freshmen and are seeking a baccalaureate nursing education that will prepare them to take the NCLEX RN exam after graduation.

Programs

- Nursing, B.S. (Pre-Licensure Track) *major*
- Nursing, B.S. (RN To Baccalaureate Track) *major*

Career Directions

Community Health
Home Care/Hospice
Hospitals
Long-term Care
Schools
Also: Graduate Study

Preparation

RN to Baccalaureate Track

Registered Nurse Licensure in Minnesota, North Dakota, or Wisconsin

Pre-licensure Track

See Section II, Enrollment for required high school preparation

Recommended High School Courses

Algebra
Biology
Chemistry
Health
Life Sciences

Nursing, B.S. *major* Pre-Licensure Track

Required Credits: 86
Required GPA: 2.25

The pre-licensure track is designed for students who are beginning their studies for the nursing major.

I. ADMISSION TO MAJOR

Application for admission to the nursing major is a separate process from admission to the university. Admission to the nursing major is required for enrollment in selected spring semester sophomore and all upper division nursing courses.

Students must be admitted to Bemidji State University prior to applying for admission to the nursing major. See Pre-Licensure Admissions Process Page for admission requirements and application.

II. PROGRESSION

All nursing and non-nursing courses required for the major must reflect a letter grade of C or better.

III REQUIRED COURSES

A. Non-Nursing Courses

Applicants must have completed at least 30 semester credits, including the designated required non-nursing courses listed as follows, for admission consideration.

Complete the following courses:

- BIOL 1111 Anatomy and Physiology for Allied Health I (4 credits)
- BIOL 1112 Anatomy and Physiology for Allied Health II (4 credits)
- BIOL 2750 Medical Microbiology (3 credits)
- CHEM 1111 General Chemistry I (4 credits)
- PSY 1100 Introductory Psychology (4 credits)
- PSY 3237 Lifespan Development (4 credits)

B. Nursing Courses

Complete the following courses:

- NRSG 2000 Introduction to Professional Nursing (3 credits)
- NRSG 2203 Introduction to Clinical Practice (4 credits)
- NRSG 2204 Health Assessment (3 credits)
- NRSG 2207 Nursing Pharmacology (3 credits)
- NRSG 3000 Elements of Scholarly Practice (2 credits)
- NRSG 3007 Acute Care Practicum I (4 credits)
- NRSG 3008 Acute Care Practicum II (4 credits)
- NRSG 3011 Nursing Care of Individuals I (4 credits)
- NRSG 3012 Nursing Care of Individuals II (4 credits)
- NRSG 3120 Transcultural Nursing (2 credits)
- NRSG 3201 The Childbearing Family (2 credits)
- NRSG 3202 Child/Adolescent Health (4 credits)

- NRSG 4001 Mental Health Nursing (4 credits)
- NRSG 4003 Rural Populations Practicum (5 credits)
- NRSG 4010 Nursing Care with Complex Needs (2 credits)
- NRSG 4100 Nursing Research (3 credits)
- NRSG 4110 Community Health Nursing (3 credits)
- NRSG 4201 Role Integration Practicum (4 credits)
- NRSG 4250 Leadership in Nursing (3 credits)

Nursing, B.S. *major* RN To Baccalaureate Track

Required Credits: 32

Required GPA: 2.25

I ADMISSION TO THE MAJOR

- Be fully admitted to Bemidji State University
- Have a cumulative GPA of 2.5 or higher
- Submit a Department of Nursing Application
- Applicants to the program must have earned an associate or diploma degree as a registered nurse. *Be licensed to practice as a registered nurse or be a graduate with license pending in Minnesota, Wisconsin or North Dakota. Full admission to the program requires unencumbered licensure.
- Have internet access suitable for delivery of online courses, practice experiences and peer collaboration.
- Students must reside in Minnesota, North Dakota, or Wisconsin and a student must have an unencumbered RN license from the state in which they reside. If a student changes state of residency while in the program they may not be able to continue in the program unless they move to North Dakota, Wisconsin, or Minnesota. If a student changes states of residency, they must notify the Department of Nursing.

II PROGRESSION

All individual nursing courses applied to the upper division major requirements must reflect a letter grade of C or better.

III REQUIRED NURSING COURSES

Complete the following courses:

- NRSG 3100 Concepts of Nursing and Health Care (3 credits)
- NRSG 3140 Advanced Health Assessment (3 credits)
- NRSG 3150 Integrative and Cultural Nursing (3 credits)
or NRSG 3400 American Indian Health Issues & Nursing (3 credits)
- NRSG 3240 Information Management and Collaborative Communication (3 credits)
- NRSG 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)
- NRSG 4116 Family and Population Health Nursing (4 credits)
- NRSG 4120 Family and Population Health Practicum (4 credits)
- NRSG 4210 Nursing Leadership and Management RN-BS (3 credits)
- NRSG 4260 Evidence, Practice, and Research (4 credits)

Complete one of the following courses for two credits:

- NRSG 3150 Integrative and Cultural Nursing (3 credits)
- NRSG 3200 Health Education in Nursing Practice (3 credits)
- NRSG 3400 American Indian Health Issues & Nursing (3 credits)
- NRSG 3410 APA Format, Nursing (2 credits)
- NRSG 3430 Health Promotion (2 credits)
- NRSG 3440 Palliative Care Nursing (3 credits)
- NRSG 3450 Holistic Nursing (2 credits)
- NRSG 3460 Child Abuse and Nursing Forensics (3 credits)

- NRSG 3920 Directed Group Study (1-4 credits)

SUGGESTED PART-TIME SEMESTER SCHEDULE FOR NURSING MAJOR, B.S.

Fall Semester

- NRSG 3100 Concepts of Nursing and Health Care (3 credits)
- NRSG 3150 Integrative and Cultural Nursing (3 credits)
or NRSGS 3400

Spring Semester

- NRSG 3140 Advanced Health Assessment (3 credits)
- NRSG 3240 Information Management and Collaborative Communication (3 credits)

Summer Semester

- NRSG 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)

Complete one of the following courses for 2 credits

- NRSG 3920 Directed Group Study (1-4 credits)
- NRSG 3200 Health Education in Nursing Practice (3 credits)
- NRSG 3400 American Indian Health Issues & Nursing (3 credits)
(if not taken in lieu of NRSG 3150 Integrative and Cultural Nursing)
- NRSG 3410 APA Format, Nursing (2 credits)
- NRSG 3430 Health Promotion (2 credits)
- NRSG 3440 Palliative Care Nursing (3 credits)
- NRSG 3450 Holistic Nursing (2 credits)
- NRSG 3460 Child Abuse and Nursing Forensics (3 credits)

Fall Semester

- NRSG 4116 Family and Population Health Nursing (4 credits)
- NRSG 4120 Family and Population Health Practicum (4 credits)

Spring Semester

- NRSG 4210 Nursing Leadership and Management RN-BS (3 credits)
- NRSG 4260 Evidence, Practice, and Research (4 credits)

A full-time program includes one Fall semester (all Fall courses as above) and one Spring semester (all Spring courses as above), followed by Summer courses as above

Nursing Courses

NRSG 2000 Introduction to Professional Nursing (3 credits)

Introduces concepts related to the discipline of nursing, health and health care, and the social context of the profession, including attention to rural health care. Addresses psychosocial and spiritual dimensions of nursing care, introducing therapeutic communication and socialization into nursing practice.

NRSG 2203 Introduction to Clinical Practice (4 credits)

The nursing process as a framework for providing a holistic approach to nursing care. Focuses on knowledge and practice related to basic needs and selected interventions, including medication administration. Learning environments include classroom and laboratory settings. Prerequisites: 4 year track enrollee, NRSG 2000.

NRSG 2204 Health Assessment (3 credits)

Introduces beginning theory and practice for systematic data collection about the health status of individuals, including the identification of characteristics common to particular age groups. Guides the student in distinguishing between normal and abnormal profiles and potential health concerns. Learning environments include classroom and laboratory settings. Prerequisites: Admission to the program and NRSG 2000.

NRSG 2207 Nursing Pharmacology (3 credits)

This course is designed to develop theoretical knowledge of pharmacotherapeutics for nursing practice. The focus of major drug classifications and specific medicinal agents will be discussed in relation to pharmacodynamics, pharmacokinetics, therapeutic uses, adverse reactions, and precautions. Prerequisites: enrollment in 4 year nursing program, NRSG 2000.

NRSG 3000 Elements of Scholarly Practice (2 credits)

Examines forms of knowledge, the interrelationship between knowledge and practice, and the development of critical reflective thought. Introduces selected nursing theories, evidence-based practice, and an exploration of implications for nursing practice approaches. Includes study of ingredients expected in formal paper presentations. Prerequisites: NRSG 2203, NRSG 2204, NRSG 2207.

NRSG 3003 Practicum: Adult/Gerian (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care to adults and gerians. Nursing practice roles and abilities relate to promotion, attainment, and preservation of health, amelioration of suffering, and supporting a peaceful death. Learning experiences include laboratory and a variety of rural health care environments. Prerequisite: 4-year track enrollee, NRSG 2000, NRSG 2203, NRSG 2204. Corequisite: NRSG 3001. Pre- or corequisite NRSG 3120.

NRSG 3007 Acute Care Practicum I (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care across the lifespan. Learning experiences include laboratory and a variety of rural health care environments. Clinical rotations may include medical surgical, operating room, intensive care units, telemetry, cardiac catheter laboratory, emergency room, or operating room, or others as assigned. Prerequisite(s): Pre-licensure track enrollee, NRSG 2203, NRSG 2204, NRSG 2207; Co-requisite NRSG 3010 or NRSG 3012.

NRSG 3008 Acute Care Practicum II (4 credits)

The nursing process, incorporating a holistic view, serves as the framework for the provision of nursing care across the lifespan. Learning experiences include laboratory and a variety of rural health care environments. Clinical rotations may include labor & delivery, postpartum & nursery, pediatrics, obstetrics & gynecology, wound or ostomy, acute rehab, or others as assigned. Prerequisite(s): Pre-licensure track enrollee, NRSG 2203, NRSG 2204, NRSG 2207; Co-requisite NRSG 3010 or NRSG 3020.

NRSG 3011 Nursing Care of Individuals I (4 credits)

Focuses on common physiological health and illness concerns experienced by adults and older adults. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management for adults and older adults. Prerequisites: Pre-licensure track enrollee, NRSG 2203, NRSG 2204, NRSG 2207.

NRSG 3012 Nursing Care of Individuals II (4 credits)

Focuses on common physiological health and illness concerns experienced by adults and older adults. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management for adults and older adults. Prerequisite(s): Pre-licensure track enrollee, NRSG 3011, NRSG 3000, NRSG 3120; Co-requisite(s): NRSG 3007.

NRSG 3100 Concepts of Nursing and Health Care (3 credits)

Introduces concepts emphasized in the program. Explores the nature of the discipline within professional and social contexts. Concepts of health are studied in relation to professional practice roles. Examines philosophies, theories, and frameworks for nursing practice. Students also address values clarification and ethical decision making. Prerequisite: Current RN license and admitted to major.

NRSG 3120 Transcultural Nursing (2 credits)

Health beliefs and practices of clients from diverse backgrounds, including the concept of rural culture and cultural barriers to quality health care. Theoretical frameworks for performing a cultural assessment and for planning and implementing culturally appropriate nursing care. Provides opportunity for students to reflect on culture in relation to oneself and nursing practice roles. Prerequisite: Admitted to major.

NRSG 3140 Advanced Health Assessment (3 credits)

Integrates understanding of altered physiologic states and principles of psychosocial and holistic nursing into a comprehensive approach to advanced nursing assessment for individuals across the lifespan. Guides the student in collecting and interpreting history information, physical information, and results of diagnostic studies. Analysis of information results in nursing diagnoses. Emphasis on advanced assessment process to evaluate response to nursing care. Prerequisite: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3150 Integrative and Cultural Nursing (3 credits)

Examines the health beliefs and practices of clients from diverse backgrounds, including the concept of rural culture and cultural barriers to quality health care. Theoretical frameworks for performing a cultural assessment and for planning and implementing culturally appropriate nursing care. Includes opportunities for students to reflect on culture in relation to oneself and nursing practice roles. Also explores integrative medicine as a component of cultural practice, values, and beliefs in response to a growing rate of patient demand for wellness-promoting integrative therapies. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3200 Health Education in Nursing Practice (3 credits)

This course examines the role of health education in nursing practice and healthcare. Concepts, principles, and theories related to teaching-learning processes are addressed. The development, delivery, and evaluation of health education are studied in relation to healthcare and professional nursing roles. Group dynamics are also examined. Prerequisite: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 3201 The Childbearing Family (2 credits)

Introduces family assessment as a framework for nursing practice. Incorporates a holistic approach in the nursing care of families and newborns during an uncomplicated perinatal experience. Prerequisites: NRSG 2203, 2204, 2207, and pre/corequisite NRSG 3008.

NRSG 3202 Child/Adolescent Health (4 credits)

Focuses on health and illness concerns experienced by infants, children, and adolescents. Studies nursing care management approaches and health care resources supportive of promotion, attainment, and preservation of health and amelioration of suffering. Includes nutritional and pharmacological dimensions of nursing practice. Prerequisites: NRSG 3012, NRSG 3008, NRSG 3201, NRSG 4001.

NRSG 3203 Practicum: The Family (4 credits)

The nursing process, including family assessment, serves as the framework for providing a holistic approach in the nursing care of childbearing families, children, adolescents, and adults. Nursing practice roles and abilities relate to promotion, attainment, and preservation of health and amelioration of suffering. Learning experiences include laboratory and a variety of rural health care environments. Prerequisite: 4-year track enrollee; Corequisites: NRSG 3201 and NRSG 3202.

NRS 3240 Information Management and Collaborative Communication (3 credits)

Introduces the concepts of delivering high quality health care focused on inter-professional communication, and the use of information management and patient care technology. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRS 3100.

NRS 3300 Health Care Policy, Finance, and Regulatory Environments (3 credits)

Provides an overview of the health care system in the United States. Examines and analyzes current health care policies at a federal, state, and facility level. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRS 3100.

NRS 3400 American Indian Health Issues & Nursing (3 credits)

Students will examine and analyze the health care issues that American Indians face in current times. Explore how the professional nurse may remedy the profound health disparities of American Indians. Prerequisite(s)/Co-requisite: NRS 3100 in RN-BS track or completion of NRS 2000 level courses in 4-yr track.

NRS 3410 APA Format, Nursing (2 credits)

This course describes the American Psychological Association (APA) (7th ed.) style and Publication guidelines and provides opportunities for application of these guidelines. Topics of focus will include manuscript structure and content, mechanics of style, crediting sources, and reference examples. Correct application of APA Style will be evaluated with quizzes and a final paper/reference page. Prerequisites: Declared nursing major.

NRS 3430 Health Promotion (2 credits)

The course applies the concepts of health promotion to nursing practice to enable the client to manage and improve health outcomes. While focusing on the methodology critical to developing a holistic plan of care for clients, students will learn the rationale and techniques for utilizing specific assessment tools, analysis of assessment data, selection of lifespan appropriate interventions, implementation of interventions, and measurement of resulting outcomes. Prerequisite(s): Admitted to the major.

NRS 3440 Palliative Care Nursing (3 credits)

This course examines nursing care needs common to individuals and families receiving palliative and end-of-life care. Emphasizes nursing practice representing a holistic, interdisciplinary, client-centered approach aimed to ameliorate suffering and support serious illness, dying, and a peaceful death. Addresses symptom-control and quality of life issues for patients with life-threatening illness who are not yet experiencing end-of-life issues. Health care resources and issues related to the provision of palliative care are addressed. Prerequisite(s): Admitted to the major.

NRS 3450 Holistic Nursing (2 credits)

This course introduces the concepts of Holistic Nursing and The American Nurses Association: Scope and Standards of practice for Holistic Nursing. This course will focus on the topics necessary to be ready to apply to take the Holistic Nurse Certificate Examination. Prerequisite(s): Admitted to the major.

NRS 3460 Child Abuse and Nursing Forensics (3 credits)

This course is intended to provide an overview of child abuse. A basic introduction of child sexual abuse and child physical abuse will be examined. The course will examine the history, etiology, assessment, and consequences of child abuse. Mandated reporting and the role of the nurse and the forensic nurse clinician in relation to child abuse will be discussed. Prerequisite(s): Admitted to the major

NRS 3920 Directed Group Study (1-4 credits)

Provides an in-depth study of a selected topic. Course title, credit, and prerequisites vary by course offering. Selected courses open to general university students. Prerequisite: 4-year track or RN enrollee.

NRS 4001 Mental Health Nursing (4 credits)

Focuses on the psychodynamics of human behavior in relation to the mental health/mental illness spectrum and common lifespan concerns. In addition to assessment, nursing care management includes interventions such as psychopharmacologic approaches and therapeutic communication. Examines nursing and health care delivery resources that address mental health needs, especially those of people living in rural areas. Prerequisites: 4-year track enrollee and all 3000-level NRS courses required for 4-year track.

NRS 4002 Palliative Care Nursing (2 credits)

Examines nursing care needs common to individuals and families receiving palliative and end-of-life care. Emphasizes nursing practice representing a holistic, interdisciplinary, client-centered approach aimed at ameliorating suffering and supporting a peaceful death. Health care resources and issues related to the provision of palliative care are addressed. Prerequisites: 4-year track enrollee and all 3000-level NRS courses required for 4-year track.

NRS 4003 Rural Populations Practicum (5 credits)

Provides opportunity to use the nursing process with a community/population as the client. Nursing practice roles and abilities relate to health promotion, attainment, and preservation of optimal health of clients, including clients with mental health needs, in diverse rural community settings. Prerequisite: Pre-licensure track enrollee, NRS 3012, NRS 3007, NRS 3201, NRS 4001.

NRS 4010 Nursing Care with Complex Needs (2 credits)

Focuses on complex physiological health and illness concerns experienced across the lifespan. Emphasis will be on implementing evidence-based nursing care that reflects an understanding of human growth and development, pathophysiology, pharmacology, medical management, and nursing management. Prerequisite(s): Pre-licensure track enrollee, NRS 3202, NRS 4110, NRS 4003.

NRS 4100 Nursing Research (3 credits)

Considers the role and use of nursing research in nursing practice. An introduction to the research process is provided and interpreted for its utilization in nursing practice. Prerequisites: Admitted to major.

NRS 4101 Nursing Research RN-BS (3 credits)

Considers the role and use of nursing research in nursing practice . An introduction to the research process is provided and interpreted for its utilization in nursing practice. Prerequisite(s): Current unencumbered RN license; Prerequisite/Co-requisite: NRS 3100.

NRS 4110 Community Health Nursing (3 credits)

Emphasizes use of the nursing process as the framework for addressing the community/population as client. Nursing role abilities inherent in the conduct of community/population-focused practice. Contemporary community topics, health concerns related to selected populations, and nursing/health care delivery in diverse community (including rural) contexts. Prerequisite: 4-year track or RN enrollee and all 3000-level NRS courses required for 4-year track or RN program except NRS 3920.

NRS 4116 Family and Population Health Nursing (4 credits)

Emphasizes the use of the nursing process as the framework for addressing the family/community/population as client. Nursing role abilities inherent in the conduct of family/community/population-focused practice. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRS 3100; Co-requisite NRS 4120.

NRS 4120 Family and Population Health Practicum (4 credits)

Provides opportunity to use the nursing process with the community and family as client. Focuses on client populations in diverse community settings and participation in professional nursing practice roles. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRS 3100; Co-requisite: NRS 4116.

NRSG 4200 Nursing Leadership And Management (4 credits)

A study of leadership/management theories, concepts, and strategies as applied to professional nursing roles and practice. Topics relate to nursing care delivery patterns, leadership/management processes, issues, and resources. The contemporary social context of nursing (including rural settings), social action, and the responsibilities of membership in the profession are addressed. Prerequisites: 4-year track enrollee and all required 3000-level NRSG courses.

NRSG 4201 Role Integration Practicum (4 credits)

A comprehensive practicum supportive to the continued development of role expectations of the baccalaureate graduate. Emphasizes providing, designing, managing, and coordinating nursing care within a selected rural setting. Prerequisites: Pre-licensure track enrollee, NRSG 3202, NRSG 4110, NRSG 4003; Co-requisites: NRSG 4010, NRSG 4100, NRSG 4250.

NRSG 4210 Nursing Leadership and Management RN-BS (3 credits)

A study of leadership/management theories, concepts, and strategies as applied to professional nursing roles and practice. Topics relate to nursing care delivery patterns, leadership/management processes, issues, and resources. Prerequisite: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 4240 Evidence, Practice, and Profession (3 credits)

Students become actively involved in an evidence-based project related to their nursing practice or area of interest. The project allows students to synthesis their nursing knowledge, experience, and research ability to produce a significant work that increases the body of nursing knowledge. Prerequisites: Current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 4250 Leadership in Nursing (3 credits)

A study of leadership/management theories, concepts, and strategies as applied to professional nursing roles and practice. Topics relate to nursing care delivery patterns, leadership/management processes, issues, and resources. The contemporary social context of nursing (including rural settings), social action, and the responsibilities of membership in the profession are addressed. Prerequisite(s): Pre-licensure track enrollee, NRSG 3202, NRSG 4110, NRSG 4003.

NRSG 4260 Evidence, Practice, and Research (4 credits)

This course considers the nursing role in the use of nursing research and evidence-based practice. An introduction to the research process and evidence-based practice is provided and interpreted for its utilization in nursing practice. Prerequisite(s): Admitted to the major, current unencumbered RN license; Prerequisite/Co-requisite: NRSG 3100.

NRSG 4917 DIS Tchg Assoc | (1-2 credits)

Directed Independent Study | Teaching Associate

All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY

1920, 2920, 3920, 4920 DIRECTED GROUP STUDY

1930, 2930, 3930, 4930 EXPERIMENTAL COURSE

1940, 2940, 3940, 4940 IN-SERVICE COURSE

1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR

1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION

1970, 2970, 3970, 4970 INTERNSHIP

1980, 2980, 3980, 4980 RESEARCH

1990, 2990, 3990, 4990 THESIS