

Rafic Hariri
School of Nursing
(HSON)

Rafic Hariri School of Nursing (HSN)

Officers of the School

Fadlo R. Khuri	President of the University
Zaher Dawy	Provost
Laila Farhood	Interim Dean of the Rafic Hariri School of Nursing
Samar Nouredine	Associate Dean for Academic Affairs
Bradley Jon Tucker	Registrar, ex-officio
Antoine Sabbagh	Director of Admissions, ex-officio
Lokman Meho	University Librarian, ex-officio

Faculty

Convener/Graduate Division	Nouredine, Samar
Coordinator, PhD Program:	Nouredine, Samar
MSN Nursing Administration and Management track coordinator	Yazbik-Dumit, Nuhad
MSN Adult-Gerontology CNS track coordinator:	Nouredine, Samar
MSN Psychiatry and Mental Health CNS Track Coordinator:	Farhood, Laila
MSN Community and Public Health Nursing Track Coordinator:	Honein, Gladys
Convener/Undergraduate Division:	Yazbik Dumit, Nuhad
TS-BSN Program Coordinator:	Tashjian, Hera
BA/BS-BSN Program Coordinator:	Madi, Dina
RN-BSN Program Coordinator:	Khoury, May
Professors:	Clinton, Michael; Farhood, Laila; Nouredine, Samar
Associate Professors	Darwish, Hala; Dumit, Nuhad
Clinical Associate Professors:	Abi Fakhr, Lina; Adra, Marina; Madi, Dina; Younan Sabbagh, Lina
Assistant Professors:	Alayan, Nour; Fares, Souha; Honein, Gladys; Massouh, Angela, Puzantian, Houry
Clinical Assistant Professors:	Assaf, Ghada; Naifeh Khoury, May

Clinical Instructors:	Avedissian, Tamar; Dakessian, Silva; Damianos, Danielle; Gulgulian, Talin; Tashjian, Hera
Part Time Faculty:	Chehadi, Mireille; Sabbagh, Rachelle

School Administrative Support

Executive and Financial Officer:	
Student Services and Recruitment Officer:	Berbary, Lynn
Simulation and Clinical Competency Center Coordinator:	Farha, Randa
IT Manager, Faculty of Medicine and Hariri School of Nursing:	Itani, Maher
IT Field Support Technician:	Karout, Toufic
Medical Librarian:	El Zein, Ola

Historical Background

The School of Nursing, founded in 1905, was the first nursing school in the Middle East. The five-year Bachelor of Science in Nursing program, established in 1936, was replaced by a four-year program in 1964 leading to the degree of Bachelor of Science in Nursing. Students entering the school as sophomores graduate in three calendar years. The RN-BSN program was reactivated and launched in 2003. The Master of Science in Nursing (MSN) program was launched in 2003. The Bachelor of Science in Nursing program (BSN) and the MSN program are registered by the Department of Education of New York State, HEGIS codes 1203.00 and 1203.10, respectively. The MSN program is accredited by CCNE, the Commission on Collegiate Nursing Education, in the USA. The AUB School of Nursing is the first School of Nursing outside the US territories to be accredited by CCNE. The PhD program, also registered in New York with HEGIS code 1203.12, was launched in the academic year 2018-2019. The Rafic Hariri School of Nursing became the seventh independent Faculty at AUB, on September 1, 2018.

Mission

The mission of the School of Nursing is to promote and maintain the highest educational standards of excellence, integrity and professionalism in nursing, following the American model of nursing education and practice. The school aims to provide learning opportunities that will enable students to grow into competent nurses guided by ethical principles, who respect cultural diversity while coordinating and delivering high-quality and compassionate nursing care in Lebanon and the region. The faculty believes education is an interactive process between faculty and students with both taking responsibility for active learning. The baccalaureate program, drawn primarily from the humanities, sciences and caring disciplines focuses on the use of nursing theory and research as a basis for practice. The master's program focuses on preparing nurses for advanced nursing practice roles. It is based on the use and generation of research-based knowledge to guide practice. The PhD program in Nursing Science aims to provide rigorous training for research careers in nursing and healthcare. The program is intended to produce research scientists who will make significant and original contributions to nursing practice, health promotion, health maintenance, population

health and healthcare delivery. Nursing students at AUB learn to think critically, develop professional attitudes and leadership skills, and appreciate the value of life-long learning and freedom of speech.

Vision

The Rafic Hariri School of Nursing aspires to become the leading school of nursing in Lebanon and the region, nationally and internationally recognized for excellence in education, research and service.

The school is committed to offering cutting-edge, culturally-relevant and internationally recognized graduate and undergraduate education. Such education would foster life-long learning and scholarship, develop leaders in nursing and health care, and attract a competent and culturally-diverse student body.

Graduate Programs

Masters of Science in Nursing (MSN) Program

The School of Nursing offers four tracks:

- Adult-Gerontology Clinical Nurse Specialist with an optional minor in Nursing Education
- Psychiatric Mental Health Clinical Nurse Specialist with an optional minor in Nursing Education
- Community and Public Health Nursing with an optional minor in Nursing Education
- Nursing Administration and Management (this program will be offered in a blended format, partly face to face and partly on line, starting academic year 2020-2021)

Both thesis and non-thesis options are available for all tracks.

Admission

A student is eligible for consideration for admission to the Master of Science in Nursing (MSN) program if s/he fulfills the following AUB admission requirements for graduate studies:

- A bachelor's degree in nursing from AUB or its equivalent from another recognized institution, with a cumulative undergraduate average of at least 75 (GPA: 2.7) and an undergraduate average of at least 80 (GPA: 3.2) in the major field of study (nursing)

Please see the Admissions section of the Graduate Catalogue (page 41.) for further details regarding the Readiness for University Studies in English (RUSE). In addition, HSON requires the following criteria:

- A license to practice nursing from country of residence
- Evidence of knowledge and competence in physical assessment skills
- At least one year of work experience in nursing

The MSN program admits students once per year in the Fall semester. Special non degree seeking students willing to register graduate nursing courses may do so in Fall or spring semesters. However, they need to be approved by the Graduate Studies Committee. The

program admits both full-time and part-time students, provided the students complete all program requirements within a maximum period of four years. Extension beyond the maximum allowed period of study requires approval of the Graduate Studies Committee of the school. Candidates who fail to meet any of the admission requirements but who, in the opinion of the faculty, demonstrate potential for graduate study are admitted on probation. Students with a cumulative undergraduate average of at least 75 (GPA: 2.7) but less than 80 (GPA: 3.2) in the major field (nursing) may be conditionally admitted as graduate students on probation. Students admitted on probation must complete 9 credits of graduate level courses within the first two terms of graduate studies, pass all courses and attain a minimum cumulative average of 80 (GPA: 3.2) to achieve regular status.

Graduation Requirements

All recommendations for graduation are made by a vote of the faculty upon the recommendation of the Graduate Studies Committee. To be eligible for graduation from the MSN program, the student must have:

- passed all required courses with a minimum grade of 70 (C+) per course,
- achieved a cumulative average of at least 80 (GPA:3.2),
- completed the total number of credits required in the track of study,
- passed the comprehensive examination,
- and completed the requirements for the thesis or project.

Academic Rules and Regulations

Transfer of Credits

Refer to Transfer of Credits section, under General University Academic Information, on page 57.

Supervision, Courses and Grades

Every graduate student is assigned an academic advisor to guide and help in planning the student's course of study, as stipulated by the graduate curriculum. Non-nursing courses relevant to the student's area of specialty can be taken as electives with the approval of the advisor. For students working toward a thesis, a thesis advisor who must be a full-time faculty member is assigned. S/he will also serve as chairperson of the thesis committee. The thesis advisor and committee members must be of professorial rank.

Graduate level courses in nursing are numbered 500 and above. All students in the MSN program are required to take NURS 6110, a zero credit course offered in the Fall of the first year, titled 'Advanced Searching of the Scientific Literature'. The minimum passing grade for a graduate course is 70 (C+). However, students are required to maintain a cumulative average of at least 80 (GPA: 3.2) in all courses taken for graduate credit. Students who are absent without excuse from more than one third of the number of sessions in any course, who fail to sit for scheduled examinations or who fail to fulfill course requirements, will be given a grade of 55 (F) for graduate courses. Results of tutorial courses, residencies, projects or theses will be reported as pass (P) or fail (F).

Students admitted with curriculum deficiencies may need to register for prerequisite undergraduate courses; such courses do not carry any graduate credit. The minimum passing grade for a prerequisite course is 70 (C+).

Probation and Dismissal

Refer to Academic Standing of Student Working for a Master's Degree section under General University Academic Information.

Comprehensive Examination

A student must pass a comprehensive examination after completion of most of the course requirements for the MSN degree. The Graduate Studies Committee of the School of Nursing sets the time of the examination. Students planning to take the comprehensive exam must register the comprehensive exam course NURS-526 (0 credit) in the term during which they are planning to sit for the exam. The purpose of the examination is to ascertain the student's knowledge of her/his field of specialization. A student who does not pass the comprehensive examination may take it a second time in the following term. Students who are unable to pass a program's comprehensive exam twice are dropped from the graduate program. Students who pass the comprehensive exam after one failure will have their initial failure reported on their transcript as "PR" for progress in the first term the course was registered in, and their passing the comprehensive exam reported as "P" in the second term the course was registered in. The comprehensive exam is offered twice per year, once in the fall and once in the spring term.

For more information, refer to Comprehensive Examination section, under General University Academic Information, on page page 61.

Thesis/Project

Those students enrolled in the MSN with the thesis option must submit a thesis based on original, independent research. The thesis must be in English. An abstract not exceeding 350 words must be submitted with the thesis. Once approval for writing the thesis/project is granted, the student must ensure that the thesis/project conforms to the guidelines outlined in the University Thesis Manual found in the library. It is mandatory to apply the manual style to the thesis; theses not conforming to the manual requirements will not be accepted. The student must submit copies of the thesis to the members of the thesis committee at least two weeks before the thesis defense. These copies should be unbound but be ready for binding.

Students, instead, may opt for a 3-credit project. If so, 3 credits of elective coursework in a related area should be taken. Students who choose to do a project are assigned an advisor who serves as the project advisor. The master's project committee should be composed of at least two members recommended by the department/program. The project's topic proposal and selection of the advisor and project committee members should be approved by the faculty/school Graduate Studies Committee at least four months before the project defense. Pass (P) or Fail (F) is reported for project defense. If Fail (F) is reported, the student may resubmit the project and defend it after a period of at least three months. Failure on the second attempt results in discontinuation of the graduate work.

For more information, refer to Supervision of Master's Thesis or Project section, under General University Academic Information, on page 63. Refer also to the Graduate Student Handbook of the School of Nursing regarding guidelines for projects and theses.

Master's Thesis Committee

The Thesis Committee should be composed of at least three members approved by the faculty Graduate Studies Committee. The thesis committee should be approved by the department chairperson/dean. The student must submit the thesis proposal to the Graduate Studies Committee for approval. It is advisable that the thesis committee includes one member from outside the School of Nursing (who can be from an institution outside AUB). All committee members should hold professorial rank. The thesis committee approves the thesis topic and research program and conducts the thesis defense.

For more information, refer to Thesis Proposal section, under General University Academic Information, on page 63.

Thesis/Project Defense

Refer to Thesis Defense and Project Defense section, under General University Academic Information, on page 65.

Deposit of Thesis/Project in the Library

Refer to Thesis Defense and Project Defense section, under General University Academic Information, on page 65.

Specific Requirements for the Master's Degree

Refer to the Admissions section in this catalogue.

Masters of Science in Nursing Curriculum

Core Courses*		Lecture Hrs./ Week	Clinical Hrs./ Week	Credit Hrs.
NURS 500	Theories, Concepts and Ethical Frameworks for Advanced Nursing Practice ¹	2	0	2
NURS 501	Advanced Nursing Practice: Scope and Roles ¹	2	0	2
NURS 530	Statistical Reasoning and Application in Nursing Research ¹	1	2	2
NURS 502	Advanced Nursing Research ¹	3	0	3
NURS 527	Systems Approach to the Development and Evaluation of Health Care Services ¹	3	0	3
Concentration Courses		Lecture Hrs./ Week	Clinical Hrs./ Week	Credit Hrs.
Adult Gerontology Clinical Nurse Specialist Track				
NURS 503	Advanced Health Assessment	2	3	3
NURS 504	Advanced Pathophysiology	3	0	3
NURS 505A	Advanced Practice in Adult-Gerontology I	2	8	4
NURS 505B	Advanced Practice in Adult-Gerontology II	2	8	4
NURS 506	Advanced Practice in Adult-Gerontology III	0	16	4
PHRM 314	Advanced Pharmacology and Therapeutics	3	0	3

1) Blended courses

Electives	-	-	0-3
Nursing Administration and Management Track			
NURS 507	Essentials of Nursing Administration and Management ¹	2	0 2
NURS 508	Advanced Practice in Nursing Administration ¹	0	16 4
NURS 531	Practical Applications of Budgeting in Nursing 1	1	0 1
NURS 525	Leadership Theories and Application for Nurse Managers ¹	3	0 3
NURS 520	Managing Quality with Teams ¹	3	0 3
NURS 533	Digital Tools for Connected Health ¹	3	0 3
MNGT 332 ¹	Human Capital Management	3	0 3
Electives	-	-	0-3
Psychiatric Mental Health Clinical Nurse Specialist Track			
NURS 503A	Advanced Health Assessment for Mental Health	1	0 1
NURS 504	Advanced Pathophysiology	3	0 3
NURS 512	Advanced Psychiatric and Mental Health Assessment	1	3 2
PHRM 314	Advanced Pharmacology and Therapeutics	3	0 3
NURS 516	Psychopathology and Human Behavior	3	0 3
NURS 517	Models of Treatment-Psychotherapy (Bio-Behavioral Nursing Interventions)	1	6 3
NURS 518	Group and Family Psychotherapy	1	6 3
NURS 519	Clinical Residency in Acute Psychiatric Care	0	16 4
Community and Public Health Nursing Track			
NURS 503	Advanced Health Assessment	2	3 3
NURS 504	Advanced Pathophysiology	3	0 3
PHRM 314	Advanced Pharmacology and Therapeutics	3	0 3
EPHD 300	Principles of Epidemiology	1	1 2
NURS 522	Principles and Practice of Community Health Nursing	2	3 3
NURS 523	Advanced Community Assessment	2	3 3
NURS 524	Clinical Residency in Community Health Care	0	16 4
Electives	-	-	0-3
Minor in Nursing Education			
EDU 318	Test Construction in Education	3	0 3
EDU 326	Theory and Design of Curriculum	3	0 3
NURS 509	Role Development in Nursing Education	3	0 3
Elective in Education		3	0 3
Thesis/Project			
NURS 599	Thesis	-	- 6
NURS 598	Project	-	- 3
Elective	Elective	-	- 3

1) Students can opt to take MNGT 332 or any equivalent course.

NURS 610 is a zero credit course on advanced searching of the scientific literature offered to PhD students. Starting Fall 2021-2022, all new MSN students ought to take this course in Fall of their first year.

1) In case MNGT 332 is not offered, students may register for an equivalent course approved by the coordinator of the Nursing Administration and Management track.

Students may take elective coursework in any major that helps them with their studies. For students doing a minor in nursing education, the elective must be in education.

The School of Nursing also offers special topic courses ranging from 1 to 3 credits that cover nursing issues of interest to students in various tracks. These courses can be counted toward the elective credits.

Doctor of Philosophy (PhD) in Nursing Science

General Information

The PhD in Nursing Science Program provides rigorous training in scholarship and research. Graduates are prepared for careers as university teachers, research scientists, educators and leaders of healthcare systems. The program contributes to building the capacity of the health workforce in Lebanon and the region.

The PhD program will focus on the following areas of research:

- Health Care Systems Research
- Biobehavioral research in health and illness
- Determinants of health and disease in individuals, families and communities
- Stress and coping
- Health promotion and risk reduction research

Program Learning Outcomes

Students are expected to:

- Demonstrate theoretical and empirical expertise in a current area of study in their discipline.
- Produce original and independent research in a priority area of healthcare that contributes to knowledge in their discipline.
- Analyze qualitative and/or quantitative information while conducting research related to their graduate program.
- Apply professionalism and ethical research conduct in their discipline.
- Demonstrate scholarly communication skills to disseminate research findings in scientific oral and written format.
- Employ teaching activities based on student learning related to their discipline.

Admission Requirements

Admission requirements and procedures as outlined in the AUB Graduate Catalogue will be followed. The PhD is a 3-4 year program, with a maximum of 5 years permitted for its completion. Admission to the program will be on a competitive basis. To be eligible for admission, applicants should have an outstanding academic record, demonstrate a genuine interest in contributing to improving healthcare outcomes, hold a master's

degree in Nursing from a recognized institution, with a minimum cumulative average of 85 over 100 (GPA: 3.7) or its equivalent, and have satisfactory GRE results. Applicants with a Non-Nursing Masters degree will be considered on a case-by-case basis and maybe required to take pre-requisite courses prior to enrolling in the PhD program.

The program will not admit students post bachelor's degree in an accelerated stream. Only holders of master's degree will be considered for admission into the program.

Regular PhD Program Requirements

The PhD program requires a minimum of 48 credit hours of coursework beyond the master's degree, including the PhD thesis work. The coursework consists of a minimum of 18 credits of core courses, 6 credits of electives and 24 credits PhD thesis work.

Candidacy Requirements

All students admitted to the PhD program must register for the Qualifying Exam Part I: Comprehensive Exam and the Qualifying Exam Part II: Defense of Thesis Proposal. Refer to both qualifying exams under the General University Academic Information of the Catalogue on page 390-391.

Admission to Candidacy

Refer to page 70 of the "Admission to Candidacy" paragraph under the General University Academic Information section of this catalogue.

Thesis Requirements

In partial fulfillment of the requirements for the degree of doctor of philosophy, a student must submit a thesis that is expected to make a significant and original contribution to her/his field of research. The research work is to be carried out under the supervision of a full-time faculty member of the Hariri School of Nursing. Faculty members will provide co-mentoring from FHS, FM, and adjunct faculty from Johns Hopkins University School of Nursing, and the University of Michigan School of Nursing as needed.

Thesis requirements follow AUB regulations outlined in the graduate catalogue. More information about the PhD Thesis Committee, the Thesis Defense and the Residence Requirements can be found in the General University Academic Information section of this catalogue.

Graduation Requirements

Refer to the General University Academic Information section of this catalogue.

Sample Curriculum Plan

Year	Fall term	Credits	Spring term	Credits
Year 1	NURS 601 Philosophical and Theoretical Perspectives in Nursing Science	3	NURS 604 Measurement in Health Research (equivalent to EPHD 411)*	3
	NURS 605 Bivariate Analysis and Linear Regression	3	NURS 602 Quantitative Research Designs	3
	NURS 606 Qualitative Research	2		
	NURS 610 Advanced Searching of the Scientific Literature	0		
Total		10		6
Year 2	NURS 607 Multivariate Analysis, Causal Modeling and Factor Analysis (equivalent to EPHD 410)**	3	NURS 608 Scholarship in Nursing	0
	NURS 609 Research Seminar	0	NURS 982 PhD Thesis	3
	Qualifying Exam I Elective	0	Elective	3
	Elective	3	NURS 603 Ethical issues in Health Research	1
Total		6		7
Years 3 & 4	Qualifying Exam II	0	NURS 983 - 987: PhD thesis	21

Course Descriptions

NURS 500 Theories, Concepts and Ethical Frameworks for Advanced Nursing Practice 2.0; 2 cr.

This course introduces students at an advanced level to conceptual resources for advanced nursing practice. The course is organized around four themes: conceptions of science and nursing knowledge; antecedents and applications of theories relevant to nursing practice; healthcare ethics; and nursing and politics. The course focuses on the application of conceptual models to current and future nursing practice.

NURS 501 Advanced Nursing Practice: Scope and Roles 2.0; 2 cr.

This course provides students with knowledge related to advanced practice roles and competencies. Students develop a vision and structure for Advanced Nursing Practice that includes the Consensus Model for Advanced Practice Registered Nurse, regulation, credentialing and emerging professional issues. The course concentrates on the foundations and philosophy of care in different specialties and health care settings.

NURS 507 Essentials of Nursing Administration and Management 2.0; 2 cr.

This course introduces management concepts and techniques. It focuses on three core topics: roles and responsibilities of managers, leading organizational effectiveness and strategic planning. The focus is on using management models and concepts to work towards improved organizational effectiveness. Case studies of organizational problems provide the basis for group practical work.

NURS 508 Advanced Practice in Nursing Administration 0.16; 4 cr.

This practicum focuses on developing advanced management and administrative nursing skills in hospitals and primary health care settings. *Prerequisite: NURS 507.*

NURS 509 Role Development in Nursing Education 3.0; 3 cr.

This course addresses principles of teaching and learning, instructional methods, test construction and use, as well as curriculum and program development as applied to nursing. The course enables students to apply educational theory and research in various settings, such as schools of nursing and staff development centers. This course is only required of students doing the minor in education.

NURS 512 Advanced Psychiatric and Mental Health Assessment 1.3; 2 cr.

This course focuses on the advanced comprehensive mental health assessment of individuals using a case-based approach. Students are provided with advanced knowledge and skills in clinical interview, focused history taking, mental status examination and diagnostic reasoning. Students performs comprehensive assessment and D.S.M. IV diagnoses on adult populations.

NURS 516 Psychopathology and Human Behavior 3.0; 3 cr.

This theory course examines the effects and/or sequels of alterations in selected bio-behavioral processes in the adult human suffering from illnesses with critical onsets and long-term unstable conditions. It focuses on the study of the brain and behavior and the neurological, physiological and biochemical foundations of cognition, mood and affect. Students will be exposed to advanced assessment skills, selected theories and research to identify complex psychiatric disorders and interventions utilizing case studies.

**NURS 517 Models of Treatment-Psychotherapy
(Bio-behavioral Nursing Interventions) 1.6; 3 cr.**

In this course, students learn the models of treatment of psychiatric and mental health disorders, and become trained on psychotherapeutic interventions in acute settings. Theories on individual psychotherapy, crisis intervention, group and family therapy are covered. This course has a clinical component where students do practicum in a psychiatric care department. Students learn the application of acquired knowledge in the field of practice and start to practice their role.

NURS 518 Group and Family Psychotherapy 1.6; 3 cr.

This course is complementary to the “Models of Treatment” course, and it focuses on group and family psychotherapeutic interventions. Students synthesize knowledge of theories in the provision of care to groups and families with complex psychiatric problems. Family and group intervention strategies are discussed in a variety of settings. Students explore the practice of these interventions in psychiatric care departments.

NURS 519 Clinical Residency in Acute Psychiatric Care 0.16; 4 cr.
 The purpose of this clinical practicum course is to provide opportunities for students to apply the content learned from courses. Students will use assessment skills, selected theories and research to identify complex health problems and interventions for diverse populations. The focus is on advanced case management and practice of the role, which is further developed as the student integrates theory and practice skills in acute and chronic or community settings. Students will spend 224 clinical hours under the supervision of a preceptor.

NURS 520 Managing Quality With Teams 3.0; 3 cr.
 This course addresses theory and application of quality teams; their composition, purposes, function and decision-making tools. Process improvement team and the use of mapping processes for process improvement are a main focus.

NURS 522 Principles and Practice of Community Health Nursing 2.3; 3 cr.
 This course introduces concepts and issues relevant to the advanced practice of public and community health nursing. Areas of focus include health promotion, management of chronic disease and health education. The course will use case studies in class and field work in the community.

NURS 523 Advanced Community Assessment and Interventions 2.3; 3 cr.
 This course focuses on nursing assessment of the health of communities using a case-based approach. Students are provided with advanced knowledge and skills in population and individual needs assessment and community-based interventions. Clinical experience will be provided.

NURS 524 Clinical Residency in Public and Community Health Care 0.16; 4 cr.
 The purpose of this clinical course is to provide students with opportunities to apply content learned in community courses, with a focus on advanced case management and health promotion. Assessment skills, theories and research will be utilized in identifying health problems and planning community interventions. *Prerequisites: NURS 522 and NURS 523.*

NURS 525 Leadership Theories and Applications for Nurse Managers 3.0; 3 cr.
 The aim of this course is to promote familiarity with critically thinking about and applying evidence-based theories of leadership in nursing settings. The course encourages a reflective and analytical approach to cultivating effective personal leadership behaviors. The course introduces the full spectrum leadership model, examines its transformational leadership components in depth, and explores similarities and differences between transformational leadership and related leadership theories.

NURS 527 Systems Approach to the Development and Evaluation of Health Care Services 3.0; 3 cr.
 The purpose of this course is to introduce students to the development and implementation of health service programs/projects intended to improve health care, practice and health system outcomes. The course addresses assessment of contemporary issues affecting health, such as the epidemiology of diseases, healthcare policies; and sociocultural, geopolitical and economic issues. It focuses on the theory and practice of planning from a system's perspective and introduces conceptual approaches and techniques of program evaluation. Students will prepare a project plan as part of the course.

- NURS 604 Measurement in Health Research 3 cr.**
This course covers theories and principles of measurement paradigms in health research. This involves designing, testing and evaluating instruments for measuring nursing phenomena in a variety of clinical, educational and health services research settings. Measurement theories and frameworks will be used to guide methods used for psychometric testing of instruments used in nursing and health research. *May be replaced by EPHD 411 offered in PhD in Epidemiology.*
- NURS 605 Bivariate Analysis and Linear Regression 3 cr.**
This course covers exploratory data analysis for univariate observations with single or multiple covariates, followed by regression methods and diagnostics with a focus on multiple linear and logistic regression. The primary objective of the course is to provide students with the skills necessary to understand regression analyses and carry out those analyses using SPSS.
- NURS 606 Qualitative Research 2 cr.**
This course explores the development and application of qualitative research designs and methods in nursing science. It considers a broad array of approaches, from exploratory narratives to focused-comparison case studies, for investigating plausible research questions. Mixed methods research is also addressed.
- NURS 607 Multivariate Analysis, Causal Modeling, Factor Analysis 3 cr.**
This course introduces multivariate techniques currently used in nursing research. Topics include multivariate analysis of variance, causal modeling, cluster analysis and factor analysis. The emphasis will be on the implementation of these techniques using SPSS, including data preparation and checking assumptions, and on interpretation. *May be replaced by EPHD 411 offered in PhD in Epidemiology.*
- NURS 608 Scholarship in Nursing: Grant Writing, Systematic Reviews, Preparing Publications 0 cr.**
This seminar provides the foundation for the development of a program of research. Students acquire skills needed for writing grant proposals, synthesizing literature in their area of interest and writing for publication.
- NURS 609 Research Seminar 0 cr.**
This course examines specific topics in chronic illness and health services research. Faculty and students will present their research in various areas of specialty.
- NURS 610 Advanced Searching of the Scientific Literature 0 cr.**
This course is offered in a workshop format to provide graduate students with the skills needed to efficiently and effectively search the scientific literature in order to answer specific research questions. The course includes a didactic component and hands-on sessions on literature search. This course is required of all MSN students, to be taken the Fall semester of the first year.
- NURS 980 Qualifying Exam Part I: Comprehensive exam 0 cr.**
- NURS 981 Qualifying Exam II: Defense of Thesis proposal 0 cr.**

