NURSING INFORMATICS

Student Welcome Packet
2022-2023
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WELCOME FROM THE PROGRAM DIRECTOR

Welcome to the Nursing Informatics program at the University of Maryland School of Nursing (UMSON). Although we may be separated by distance, our faculty, staff, and students form a close community. We are delighted that you are now one of us.

Whether you have been working in nursing informatics or are new to the field, your time in the program will be one of transition. You will acquire new perspectives on the uses of knowledge and information in nursing practice and on the information technologies that support those uses. You will be moving to a higher level of professional practice as you master the knowledge, skills, and roles of the informatics nurse specialist. You will become a contributing member of the nursing informatics community in our program, nationally, and internationally.

The UMSON faculty and I are committed to helping you to succeed and grow professionally. We will demand a great deal from you, and we will support your efforts to reach your goals. We hope you will contact us when you have questions or concerns, not only about your courses, but also about your career and your professional life. We know that life circumstances and work obligations sometimes pose challenges to adult learners. Please let us know if situations arise that might require special consideration.

We have prepared this packet to help you get acquainted with our program and to provide information and resources for getting started. There is much more information on UMSON’s website. If you can’t find the answers you need, please ask one of us.

With best wishes for a fulfilling student experience,

Cheryl Fisher

Cheryl A Fisher EdD, MSN, RN
Associate Professor and Interim Program Director
Nursing Informatics
Department of Organizational Systems & Adult Health
University of Maryland School of Nursing
Cheryl A Fisher EdD, MSN, RN associate professor and Interim Specialty Director for the informatics program has a research background focused on teaching with technology, translating evidence into health care practices for the bedside nurse and evaluating the integration of technology into practice. Dr. Fisher developed new programs for a clinical setting to meet identified learning needs using computer-based training and competency validation. While working at the National Institutes of Health, Dr. Fisher worked to design, develop, implement, and evaluate innovative technologies in conjunction with the National Library of Medicine to integrate a personalized decision support system into the electronic medical record to enhance patient care. Dr. Fisher has published numerous peer-reviewed journal articles looking at student learning online and co-authored, “Developing Online Courses in Nursing Education”, now in its fourth edition. Dr. Fisher has also published Training Essentials for Implementing Healthcare IT, in Health Care Information Technology. Dr. Fisher has taught nursing informatics in undergraduate and graduate levels for 10 years and has mentored many graduate students in evidence-based practice projects using technology in the clinical setting.

Arpad Kelemen, PhD, professor, has expertise in biomedical informatics; EHR and healthcare database development, optimization, and evaluation; healthcare software and game development; human-computer interaction; intelligent patient care technologies with artificial intelligence; and data mining of large healthcare data. Dr. Kelemen has published over 70 peer reviewed papers and three books. He was PI on a HRSA grant, "Nursing informatics program focused on diversity and the underserved". In addition, he has received funding from NSF, NIH, NYSTAR, and the US NAVY. He developed a large-scale intelligent software agent for human-like decision making for the job assignment problem. He develops models, algorithms, and intelligent systems for large-scale biomedical data, including healthcare, genomic, and clinical data. He currently leads development of educational and patient-centered online healthcare games.
Eun-Shim Nahm, PhD, RN, FAAN, professor, Nursing Informatics Program and Associate Dean of the PhD Program. Dr. Nahm’s research focuses on the use of digital health interventions to engage patients and their caregivers, and community-dwelling older adults in their care and to promote the management of chronic conditions. She is a recipient of multiple grant awards from the National Institutes of Health (NIH) and Agency for Healthcare Research and Quality (AHRQ). Most recently, she completed an R21 study, “A Theory-Based Patient Portal eLearning Program for Older Adults with Chronic Illnesses” (07/2016–06/2019), funded by the AHRQ. Currently, Dr. Nahm is leading online cancer survivorship studies in collaboration with the clinicians at the University of Maryland Greenebaum Comprehensive Cancer Center (UMNursing Grant) and a 5-year implementation grant project, “Care Coordination Education-to-Practice Scale-Up Implementation” (07/2020-06/2025), funded by the Nurse Support Program II. She has published more than 75 peer-reviewed journal articles and five book chapters in the field. Dr. Nahm teaches graduate-level nursing informatics courses and doctoral-level research courses. She has mentored numerous graduate and doctoral students, as well as junior faculty members.

Ernest Opoku-Agyemang, PhD, MA, RN, assistant professor, has expertise in supporting and implementing information systems in healthcare, finance, e-business and e-commerce. Dr. Opoku had served as a Senior Systems Test Engineer on the Community Health Automated Medicaid Processing System (CHAMPS) Medicare Management Information System for the State of Michigan. Prior to that, he worked in the financial industry as a consultant on the Order Audit Trail System (OATS) for the NASDAQ stock market. Dr. Opoku is the recipient of the prestigious British Drummond Wolff award for his MA degree at University of Hull (UK). He was a recipient of the MHEC Nursing Educator Doctoral Grants for Practice and Dissertation Research (NEDG) and the New Nursing Faculty Scholarship. Areas of interest include electronic health records and barcoded computerized medication administration. He received his PhD from the UMSON with a research focus on using mobile applications in managing chronic diseases.
| Barbara Van de Castle, DNP, APRN-CNS, OCN, RN-BC, Assistant Professor, is a board-certified informatics nurse specialist and a doctorally prepared oncology-certified nurse educator. Her background includes supporting oncology clinicians in the use of EHRs to improve workflow and patient outcomes, taught Epic’s Beacon program as a Credentialed Trainer. Dr. Van de Castle’s work focuses on innovation, and focuses on Evidence Based Practice in Informatics. She is actively engaged in the local chapter of the Oncology Nursing Society and in 2017 was awarded the Mary Nowotny Excellence in Cancer Nursing Education Award Recipient at the 2017 ONS National Congress. She is a member of ANA, ANIA and Sonsiel. She is also the Co-Chair of our Summer Institute of Nursing Informatics (SINI). |
GRADUATE PROGRAMS IN NURSING INFORMATICS
VISION AND MISSION

VISION

The University of Maryland School of Nursing (UMSON) will be a leading academic program in nursing informatics and renowned for its educational programs and research focused on the use of informatics solutions to optimize health outcomes.

UMSON will be recognized for leadership and excellence in education, health information technology policy, research, and health informatics applications on the national and international levels.

MISSION

Our mission encompasses education, research, health information technology policy, and application.

Education
• UMSON will offer exceptional and rigorous educational programs for nursing informatics practice, scholarship, and research.
• All nursing informatics graduates will have knowledge and skill in the foundations for contemporary health informatics practice.

Research
• UMSON will support research conducted by nursing informatics faculty members, and students will advance knowledge and practice in the informatics domain.
• Success and excellence in research among nursing informatics faculty members and students will be demonstrated by external funding and scholarly activities.

Health Information Technology Policy
• Nursing informatics faculty members and students will use informatics resources to further social and informatics-related policies by collaborating with professional, government, and non-governmental organizations.
• Nursing informatics faculty members and students will participate in the development, advocacy, and evaluation of health information technology policy on the local, national, and international levels.

Application
• Nursing informatics faculty members and students will apply informatics solutions in support of quality, safety, outcomes, and evidence-based practice.
BECOMING A NURSING INFORMATICS PROFESSIONAL

NURSING INFORMATICS: SCOPE AND STANDARDS OF PRACTICE

As a nursing informatics student, you should purchase *Scope of Standards of Nursing Informatics Practice (3rd edition)*. This booklet will be required in some of your classes. More information on purchasing this booklet is available on the American Nurses Association website (http://nursingworld.org).

CERTIFICATION IN NURSING INFORMATICS

Certification in nursing informatics is not required to practice. It does, however, attest to your expertise and may provide an advantage in employment and advancement. There are currently two organizations offering certification for informatics nurse specialists:

- American Nurses Credentialing Center
  https://www.nursingworld.org/ancc/

- Health Information Management and Systems Society
  https://www.himss.org/resources/certification

Your program faculty members respect both organizations and do not endorse either in preference to the other.

NURSING INFORMATICS PROFESSIONAL ORGANIZATIONS

As a nursing informatics student, you may want to consider joining the following organizations:

- American Medical Informatics Association (AMIA) - NI Working Group
  http://www.amia.org
  - AMIA’s Nursing Informatics Working Group provides excellent professional development and networking opportunities.
  - AMIA offers a low student membership rate of $50 per calendar year (for students living within the U.S.) with proof of full-time matriculation.
  - AMIA offers student discount rates to AMIA meetings and discounts to special non-AMIA meetings. (http://www.amia.org/about-amia/membership-categories)

- American Nursing Informatics Association (ANIA)
  http://www.ania.org
  - ANIA membership gives you access to a network of over 2,200 informatics professionals in all 50 states and 34 countries.
  - The organization has an active e-mail list and job bank with employee-paid postings.
  - ANIA offers a student membership option, which is $40 for one year. https://www.ania.org/membership
• Healthcare Information and Management Systems Society (HIMSS)
  http://www.himss.org
  o The national organization and state chapters provide excellent professional development and networking opportunities.
  o HIMSS awards seven scholarships to select HIMSS student members who have demonstrated academic achievement. (https://foundation.himss.org/Scholarships)
  o HIMSS offers a low student membership rate of $30 with proof of full-time matriculation.

• Alliance for Nursing Informatics (ANI)
  http://www.allianceni.org
  o The member organizations are the many nursing specialty organizations that recognize informatics as an important dimension of, or influence upon, nursing practice.
  o Sponsored by the AMIA and HIMSS, the alliance provides a unified voice for nursing informatics and an organizational home for the Technology Informatics Guiding Education Reform (TIGER) initiative, (https://www.himss.org/what-we-do-initiatives/technology-informatics-guiding-education-reform-tiger)
  o The alliance is an organization of organizations and does not have individual memberships.
GETTING STARTED

ORIENTATION

Attending the face-to-face orientation is highly recommended for students living in the Baltimore area. The orientation covers various aspects of registration and provides a checklist of items you will need.

- **Face-to-Face (FTF) Orientation:** The information about the FTF orientation can be found in the admission materials sent by UMSON.
- **Virtual Orientation:** If you are unable to attend any of the FTF orientation sessions, please visit our Virtual Orientation Center: [http://nursing.umaryland.edu/admissions/accepted](http://nursing.umaryland.edu/admissions/accepted)

POLICIES, PROCEDURES, SERVICES, AND RESOURCES

The UMSON *Student Handbook* is accessible online at [http://www.nursing.umaryland.edu/student-life/handbook/](http://www.nursing.umaryland.edu/student-life/handbook/). The handbook includes the policies followed in all UMSON courses, as well as in-depth information about UMSON procedures, services, and resources.

The UMSON *Student Life* webpage ([http://www.nursing.umaryland.edu/student-life/](http://www.nursing.umaryland.edu/student-life/)) is a resource for students and has information about campus services and resources.

THE UNIVERSITY OF MARYLAND NURSING INFORMATICS LISTSERV

All students in the Nursing Informatics specialty **must** subscribe to the NI listserv. This is our main line of communication. Students, faculty members, and alumni belong to the listserv. We post questions, exchange ideas, and provide information about job opportunities.

To subscribe to the son.Nilist:
- Send an e-mail to sympa@lists.umaryland.edu from the address you want to subscribe to the list.
- In the subject line, put: Subscribe son.nil <Your Name>

To unsubscribe from the son.Nilist:
- Send an e-mail to sympa@lists.umaryland.edu from the address you want to unsubscribe from the list.
- In the subject line, put: Unsubscribe son.nil

Nursing Informatics Team Collaboration Site

This year we are trying something new. Since students who participate in distance learning sometimes feel isolated, we wanted to set up a collaborative site for you to meet your colleagues and make friends. You can chat, keep up to date with important information in the field and get to know each other. The link will be sent to you by email so stay tuned!
**Obtain Your MyUMB ID Account**

The MyUMB ID is a single sign-on system designed to allow access to multiple University systems. Some of the systems that use the MyUMB ID include:

- MyUMB Portal
- MyUMB Mail *(this is required in order to e-mail faculty)*
- Blackboard
- SURFS
- Campus Wireless System
- iTunes University
- Library resources

For information on how to obtain a MyUMB ID account, please visit [UMID Login Reference - Center for Information Technology Services (umaryland.edu)](http://www.umaryland.edu). If you need further assistance, please visit the IT Helpdesk information page at: [http://www.umaryland.edu/helpdesk/](http://www.umaryland.edu/helpdesk/). The IT Helpdesk is able to assist you with MyUMB One Card services, MyUMB email accounts, User IDs and passwords, and SURFS (Student User Friendly System).

**SURFS: Student User Friendly System**

SURFS is a Web-based companion to UMB’s Student Information Management System. The SURFS Web page provides current students with online, real-time information about their student records. Students can review their registration, grades, academic record, accounts receivable, and financial aid information. SURFS is located at [http://www.umaryland.edu/surfs/](http://www.umaryland.edu/surfs/).

**Blackboard Access for Web-Based Courses**

Go to the UMB Blackboard site, [http://blackboard.umaryland.edu/](http://blackboard.umaryland.edu/), and log in using your MyUMB ID. Select the Web-based course(s) for which you are officially registered.

If you have trouble logging into Blackboard, e-mail tech support at help@umaryland.edu or call 410-706-HELP (4357). If you are unfamiliar with Blackboard, review the Student Blackboard FAQ’s at [https://www.umaryland.edu/blackboard/student-topics/](https://www.umaryland.edu/blackboard/student-topics/).

*Please note that Web-based courses usually open for students one week before the first day of classes each semester.*

**Obtain Your UMB One Card (Student ID)**

Face-to-face and distance learning students can also get a student ID card. This card is useful to access University facilities online and on campus, as well as for obtaining student discounts for conferences, professional memberships, and educational materials. Please visit the UMB One Card website for instructions on how to obtain the ID card at [http://www.umaryland.edu/onecard/](http://www.umaryland.edu/onecard/).
**OBTAIN A PARKING PERMIT**

The student parking lot is located at the Lexington Garage, 680 W. Lexington Street. Parking permits are processed through the parking website at [http://www.umd.edu/parking/student-parking/](http://www.umd.edu/parking/student-parking/).

**PURCHASING TEXTBOOKS**

You can access the bookstore homepage via the UMB homepage [https://umb.bncollege.com/shop/um-baltimore/page/find-textbooks](https://umb.bncollege.com/shop/um-baltimore/page/find-textbooks). To order textbooks, enter the term, department, course number, and section. You can order books for delivery or on-campus pick-up.

**Castle Branch Compliance**

In order to be compliant with UMSON and UMB's Student Health, please make sure that you complete compliance items in Castle Branch, including drug screening and background check. (Refer to the Admissions Letter and Compliance Requirements in [https://www.nursing.umd.edu/admissions/accepted](https://www.nursing.umd.edu/admissions/accepted).)

**ACCESS TO HS/HSL RESOURCES**

Internet access to library resources, including e-journals, e-books, electronic reserves, and databases, requires you to use your myUMB ID and password to log onto the Health Sciences and Human Services Library (HS/HSL) resources from off-campus.

Students must be enrolled in a credit course to have access to online resources. Those enrolled in continuing education classes are not eligible. More information is available on the library's website, [http://www.hshsl.umd.edu/](http://www.hshsl.umd.edu/).

**STEPS Program**

All students registered for a practicum course in the MSN program must have an account in the UMSON placement system STEPS. The system, known as STEPS, is owned by EXXAT, a company that provides health profession education and placement management. Prior to starting your practicum, you will receive an e-mail from UMSON about your account.

**Account Set-Up:**

1. Check your compliance status in CastleBranch. Students must be compliant to complete a practicum assignment.
2. Activate your STEPS account. Shortly, you will receive an email to your @umd.edu account from Exxat to activate your account (EXXAT is the company that owns STEPS). Use your UMID login and password.
3. Set up your account by XXXX (the school will tell you). If you do not receive an email (check junk/spam folder) by XXXX (the school will tell you).
4. Complete your student profile. All profiles must include your address and phone number.
5. Watch the online trainings. After activating your account please review the online trainings available in STEPS.

6. Attend the online training session on [TBD]. An email with the more details sent closer to training date.

Use During Practicum:

7. Timesheets: Log your practicum hours.

Degree Works

Degree Works is a degree audit and advising system to help students and advisors develop a plan of study for the program and keep track of students’ progress. The program includes a summary of the student’s academic information bridged from the “Banner Student” section. Students’ can access the program via the link found on the “Student Life” section of the UMSON website. Also, this link will provide you with a student guide to Degree Works. It will help to review it prior to accessing the software.
PLANNING YOUR ACADEMIC PROGRAM OF STUDY

WEB-BASED LEARNING

Web-based courses are designed as "anytime, anywhere" learning environments offered via the Internet using a Web browser. You will engage in course content and communicate with peers and instructors online. Therefore, you must have access to a computer with Internet connectivity, and you will need to plan your learning time to fit your schedule. Each online course is a different experience, implementing various instructional strategies best suited for varying content and learning styles. Students taking a three-credit course spend at least six hours online each week in order to:

- View online lectures and presentations with audio/video
- Explore course-related Internet sites
- Engage in discussions and post messages
- Collaborate with other students during group projects
- Participate in research using electronic library resources
- Complete and submit course assignments

The main benefit of distance education is convenience - the freedom to take courses where you want on a more relaxed schedule than in a traditional course. Course content is divided into modules, which students are expected to digest on a set schedule. However, students choose when and where to complete each module before the deadline. Although you have more freedom in completing assignments, there may be occasions when you are required to interact with your instructor or classmates at pre-scheduled times.

The other benefit of distance education is flexibility in communicating with the supporting organization and instructor. Options include using both asynchronous (i.e. bulletin boards) and synchronous (i.e. chat rooms) communication modes, e-mail, fax, and telephones. Students also have access to a number of online services, including completing administration functions and accessing library resources. With this freedom comes responsibility. Since you will be interacting with others remotely and will be more responsible for your schedule than a traditional student, online students must be able to:

- Develop and maintain their own schedules for completing coursework
- Write clearly and effectively
- Adapt to working in a new learning environment
- Learn new computer skills to complete assignments

It is important to reiterate that as an online student you have more freedom and convenience in completing coursework. However, with more flexibility, you have more responsibility in completing assignments on your own within a Web-based learning environment.
ONLINE LEARNING SUGGESTIONS

If you are an online nursing informatics student, consider the following suggestions:

1. **Explore the UMSON website and familiarize yourself with online education.** Visit http://www.nursing.umaryland.edu/student-life/ where you will find links to University resources.

2. **If you live in a state other than Maryland or in another country, discuss your potential practicum site with Dr. Cheryl Fisher early in your program.**

3. **Remember that you must subscribe to the NI listserv, our program’s listserv.** This is our main line of information exchange and communication, especially if you are a distance/online student. *See Page 8 for subscription instructions.*
COURSE SCHEDULING AND SEQUENCING: MSN PROGRAM AND NURSING INFORMATICS CERTIFICATE

The nursing core courses may be taken in any sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>When Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 780</td>
<td>Health Promotion and Population Health</td>
</tr>
<tr>
<td>NRSG 782</td>
<td>Health Systems and Health Policy: Leadership and Quality Improvement</td>
</tr>
<tr>
<td>NRSG 790</td>
<td>Application of Science for Evidence-based Practice</td>
</tr>
<tr>
<td>NRSG 795</td>
<td>Biostatistics for Evidence Based Practice</td>
</tr>
</tbody>
</table>

The management courses may be taken in any sequence:

<table>
<thead>
<tr>
<th>Course</th>
<th>When Offered</th>
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</thead>
<tbody>
<tr>
<td>NURS 690</td>
<td>Managerial Health Finance</td>
</tr>
<tr>
<td>NURS 691</td>
<td>Organization Theories: Application to Health Service Management</td>
</tr>
</tbody>
</table>

In general, the informatics courses must be taken in the sequence shown. However, NURS 785 may precede or follow NURS 784 and NURS 786.

<table>
<thead>
<tr>
<th>Course</th>
<th>When Offered</th>
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</thead>
<tbody>
<tr>
<td>NURS 736 Technology Solutions for Knowledge Generation in Health Care</td>
<td>Fall, Spring</td>
</tr>
<tr>
<td>NURS 786 Systems Analysis and Design in Health Care</td>
<td>Spring</td>
</tr>
<tr>
<td>NURS 784 Information Technology Project Management</td>
<td>Fall</td>
</tr>
<tr>
<td>NURS 785 Health Care Database Systems</td>
<td>Spring, Summer</td>
</tr>
<tr>
<td>NURS 737 Nursing Informatics Concepts and Practice in Systems Adoption</td>
<td>Fall</td>
</tr>
<tr>
<td>NURS 738 Practicum in Nursing Informatics</td>
<td>Spring</td>
</tr>
<tr>
<td>NURS 770 Human-Technology Interaction in Healthcare</td>
<td>Spring, Summer</td>
</tr>
</tbody>
</table>

Some courses have co-requisites or prerequisites

- NURS 737 prerequisites: NURS 736, NURS 786, NRSG 790, NRSG 795
- NURS 738 prerequisites: NURS 737, NURS 785 NURS 690, NRSG780, NRSG782
- NURS 738 pre- or co-requisites: NURS 691, NURS 784
- NURS 770 pre- or co-requisite: NRSG 790
PLANS OF STUDY

The plans of study for the Master of Science in Nursing (MSN) Program offer full-time or part-time study with spring or fall matriculation. Military and international students may require plans of study that meet regulatory requirements and should be constructed in concert with the academic advisor and relevant regulatory agency official to ensure compliance with requirements.

The plans of study for the Nursing Informatics Certificate program offer both part-time and full-time study with spring or fall matriculation (19 credits).
# MSN in Nursing Informatics
## Full-Time Plan of Study: Fall and Spring Matriculation

### Fall Matriculation

#### Semester I (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 780</td>
<td>Health Promotion and Population Health</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 790</td>
<td>Application of Science for Evidence-based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 782</td>
<td>Health Systems and Health Policy: Leadership and Quality Improvement</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Semester II (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 736</td>
<td>Technology Solutions for Knowledge Generation in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 795</td>
<td>Biostatistics for Evidence Based Practice</td>
<td>3</td>
</tr>
<tr>
<td>NURS 786</td>
<td>Systems Analysis and Design in Health Care</td>
<td>3</td>
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</tbody>
</table>

#### Semester III (Summer)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NURS 785</td>
<td>Health Care Database Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Semester IV (Fall)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 690</td>
<td>Managerial Health Finance</td>
<td>3</td>
</tr>
<tr>
<td>NURS 737*</td>
<td>Nursing Informatics Concepts and Practice in Systems Adoption</td>
<td>3</td>
</tr>
<tr>
<td>NURS 784</td>
<td>Information Technology Project Management</td>
<td>3</td>
</tr>
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</table>

#### Semester V (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS738*</td>
<td>Practicum in Nursing Informatics</td>
<td>4</td>
</tr>
<tr>
<td>NURS 691</td>
<td>Organization Theories: Application to Health Service Management</td>
<td>3</td>
</tr>
<tr>
<td>NURS 770</td>
<td>Human- Technology Interaction in Healthcare</td>
<td>3</td>
</tr>
</tbody>
</table>

### Spring Matriculation

#### Semester I (Spring)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRSG 780</td>
<td>Health Promotion and Population Health</td>
<td>3</td>
</tr>
<tr>
<td>NURS 691</td>
<td>Organization Theories: Application to Health Service Management</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 790</td>
<td>Application of Science for Evidence-based Practice</td>
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</table>

#### Semester II (Summer)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NRSG 782</td>
<td>Health Systems and Health Policy: Leadership and Quality Improvement</td>
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#### Semester III (Fall)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NURS 690</td>
<td>Managerial Health Finance</td>
<td>3</td>
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<tr>
<td>NURS 736</td>
<td>Technology Solutions for Knowledge Generation in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NRSG 795</td>
<td>Biostatistics for Evidence Based Practice</td>
<td>3</td>
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</tbody>
</table>

#### Semester IV (Spring)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>NURS 785</td>
<td>Health Care Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>NURS 786</td>
<td>Systems Analysis and Design in Health Care</td>
<td>3</td>
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</table>

#### Semester V (Summer)

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>NURS 770</td>
<td>Human- Technology Interaction in Healthcare</td>
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#### Semester VI (Fall)

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<tr>
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<tbody>
<tr>
<td>NURS737*</td>
<td>Nursing Informatics Concepts and Practice in Systems Adoption</td>
<td>3</td>
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<tr>
<td>NURS 784</td>
<td>Information Technology Project Management</td>
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#### Semester VII (Spring)

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>NURS738*</td>
<td>Practicum in Nursing Informatics</td>
<td>4</td>
</tr>
</tbody>
</table>

### Total Credits

- **Fall Matriculation**: 40 credits
- **Spring Matriculation**: 40 credits
### MSN in Nursing Informatics
#### Part-Time Plan of Study: Fall and Spring Matriculation

**Fall Matriculation**

**Semester I (Fall)**
- NRSG780: Health Promotion and Population Health 3
- NRSG790: Application of Science for Evidence-based Practice 3

**Semester II (Spring)**
- NURS 691: Organization Theories: Application to Health Service Management 3
- NRSG 795: Biostatistics for Evidence Based Practice 3

**Semester III (Summer)**
- NRSG 782: Health Systems and Health Policy: Leadership and Quality Improvement 3

**Semester IV (Fall)**
- NURS 690: Managerial Health Finance 3
- NURS 736: Technology Solutions for Knowledge Generation in Health Care 3

**Semester V (Spring)**
- NURS 786: Systems Analysis and Design in Health Care 3
- NURS 785: Health Care Database Systems 3

**Semester VI (Fall)**
- NURS 737*: Nursing Informatics Concepts and Practice in Systems Adoption 3
- NURS 784: Information Technology Project Management 3

**Semester VII (Spring)**
- NURS 738*: Practicum in Nursing Informatics 4
- NURS 770: Human- Technology Interaction in Healthcare 3

**Spring Matriculation**

**Semester I (Spring)**
- NRSG 780: Health Promotion and Population Health 3
- NRSG 790: Application of Science for Evidence-based Practice 3

**Semester II (Summer)**
- NRSG 782: Health Systems and Health Policy: Leadership and Quality Improvement 3

**Semester III (Fall)**
- NRSG 795: Biostatistics for Evidence Based Practice 3
- NURS 736: Technology Solutions for Knowledge Generation in Health Care 3

**Semester IV (Spring)**
- NURS 690: Managerial Health Finance 3
- NURS 786: Systems Analysis and Design in Health Care 3

**Semester V (Summer)**
- NURS 785: Health Care Database Systems 3

**Semester VI (Fall)**
- NURS 737*: Nursing Informatics Concepts and Practice in Systems Adoption 3
- NURS 784: Information Technology Project Management 3

**Semester VII (Spring)**
- NURS 738*: Practicum in Nursing Informatics 4
- NURS 691: Organization Theories: Application to Health Service Management 3

**Semester VIII (Summer)**
- NURS 770: Human- Technology Interaction in Healthcare 3

**Total Credits** 40

*Denotes courses that must be taken in this specialty. No waivers or transfer credits accepted.
# NURSING INFORMATICS CERTIFICATE PROGRAM

## PLAN OF STUDY: FALL AND SPRING MATRICULATION

### Fall Matriculation

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| Total Credits | 19 |

### Spring Matriculation

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>NURS 76</td>
<td>Systems Analysis and Design in Health Care</td>
</tr>
<tr>
<td>NURS 736</td>
<td>Technology Solutions for Knowledge Generation in Health Care</td>
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</table>

| Total Credits | 19 |

*Denotes courses that must be taken in this program. No waivers or transfer credits accepted.

The Graduate School of the University of Maryland, Baltimore (UMB) requires all master’s degree students to complete a comprehensive examination. The Nursing Informatics (NI) Specialty examination requires completion of a scholarly paper -- a manuscript acceptable for publication in a print or online journal (publication is not required).

The purpose of the scholarly paper is to evaluate the student’s overall synthesis of the master’s degree content and knowledge, including: 1) interrelationships of concepts within nursing practice; 2) knowledge and use of theoretical/conceptual bases for master’s level practice (advanced specialty practice); 3) knowledge of the research process and its application to nursing or health problems; and 4) the ability to synthesize materials, organize thoughts, and present them in an orderly manner. The scholarly paper must be pre-approved by the advisor and must be completed within the required time frame in order for the MS student to graduate. (Refer to the Graduate Student Handbook).
REGISTERING FOR COURSES

Once you are admitted, **develop your plan of study by consulting with your advisor.** Each semester, review the plan of study with your advisor during the advisement period to determine the courses for which you should register in the upcoming semester.

To begin the registration process, go to [http://www.umaryland.edu/surfs](http://www.umaryland.edu/surfs) and click on the **Class Schedule.**

To register online, go to [http://www.umaryland.edu/surfs](http://www.umaryland.edu/surfs) and click in the box labeled **Login to SURFS.**

- Follow instructions to login.
- Click **Student Records.**
- Click **Registration.**
- Click **Select Term** and choose the desired semester. (Only one semester can be registered for at a time).
- Click **Submit.**
- Click **Register, Add/Drop Classes** and then scroll down to the **Add Classes Worksheet** section.
- Enter the CRN number(s) for your desired course(s) and section(s). (If you are unsure of the CRN numbers, use the **Class Search** option to find your desired classes. You may either a) copy down the CRN number and enter to the Add Classes Worksheet or b) Select the box next to the CRN number and choose **Register** or **Add to Worksheet.**
- Click **Submit Changes** and your courses will appear in the **Student Detail Schedule** area.

You might encounter the following registration errors:

- Time conflict – You have selected classes that meet at the same time.
- Closed Section – Course is full and closed for further registration.
- Class Restriction – You are not eligible to register for the course.
- Holds – Student Health, Foreign Student, and Student Accounts place holds. Contact the appropriate office to have holds removed.
- Course Pre-requisites – You have not met the requirements to register for this course.

Don’t forget to print your schedule. Click “Student Schedule by Day and Time” for a quick table format, or click “Student Detail Schedule” for a more detailed version.

If you have questions, call the registration hotline at 410-706-2799.
CHOOSING COURSES FROM UNIVERSITY OF MARYLAND INSTITUTIONS

COURSES OF INTEREST TO NURSING INFORMATICS STUDENTS

- If you need to take courses from another campus, courses must be graduate-level courses.
- Consult with your advisor about electives that interest you. Your advisor must approve the elective before you can register.
- Courses listed below are some examples; course numbers and names are subject to change. You are welcome to explore other classes.

**University of Maryland, Baltimore County, Catonsville (UMBC)**

Course descriptions/schedule: [http://informationsystems.umbc.edu/home/graduate-programs/graduate-course-listing/](http://informationsystems.umbc.edu/home/graduate-programs/graduate-course-listing/)

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>IS 603</td>
<td>Decision-Making Support Systems</td>
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</tr>
<tr>
<td>IS 629</td>
<td>Human Factors in Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>IS 760</td>
<td>Human-Computer Interaction</td>
<td>3</td>
</tr>
</tbody>
</table>

(or other appropriate courses at the 600 level or higher)

Contact the registration office to confirm that your inter-institutional enrollment form has been received:  
Tel: 410-455-2500 /Fax: 410-455-1141.

**University of Maryland, College Park (UMCP)**

Course descriptions/schedule: [https://app.testudo.umd.edu/soc/](https://app.testudo.umd.edu/soc/)

Contact the registration office to confirm that your inter-institutional enrollment form has been received:  
Tel: 301-314-8240 / Fax: 301-314-9568.
University of Maryland Global Campus (UMGC)

Course descriptions/schedule:  http://www.umgc.edu/students/catalogs/

- IMAT 639  Internet Multimedia Applications  (3 credits)
- INFA 610  Computer Security, Software Assurance, Hardware  (3 credits)
- INFA 620  Network and Internet Security  (3 credits)
- ISAS 630  Systems Analysis and Design  (3 credits)
- ISAS 640  Decision Support Systems and Expert Systems  (3 credits)
- OMDE 601  Foundations of Distance Education  (3 credits)
- OMDE 610  Teaching and Learning in Online Distance Education  (3 credits)
- PMAN 634  Foundations of Project Management  (3 credits)
- DBST 651  Relational Database Systems  (3 credits)

(or other appropriate courses at the 600 level or higher)

UMGC Admissions Information

Contact the registration office at 1-800-888-8682 to confirm that your inter-institutional enrollment form has been received. The UMGC registration office’s fax number is 301-985-7364.

Once your inter-institutional enrollment form has been processed, you will receive your self-service (MyUMGC) login information via e-mail.

UMGC Financial Information

UMGC tuition and fees must be paid directly to UMGC only (not through UMB). If you have any additional questions regarding financial information, please contact UMB Student Accounting at 410-706-1334.
**INTER-INSTITUTIONAL ENROLLMENT PROCESSING INSTRUCTIONS**

1. Obtain the carbon copy Inter-Institutional Enrollment form from the UMSON Office of Registration Services (for online students, please contact the registration office for e-version form).
2. Complete the top portion of the form.
3. Select your home and host campus.
4. Select the semester and insert the year.
5. Provide Course Prefix, Course #, Section #, and Grading Option (R-Regular, A-Audit, P/F-Pass/Fail, and Credit Hours).
6. Have advisor sign in space labeled “Home Institutional Academic Approval.”
7. Make a copy for your records and attach the completed form to your registration form. Take the completed registration and inter-institutional forms to the Office of Registration Services located at 655 W. Lombard St., Room 108. (Distance students: Please e-mail the completed form to your advisor, who will be happy to assist you.)

**Important Information**

1. The Office of Registration Services will be responsible for faxing your inter-institutional request to the host institution.
2. You will be responsible for verifying with the host institution (registrar’s office) that your enrollment has been processed. If after five business days the registration is not processed, you must contact the Office of Registration Services at 410-706-2799 or e-mail registration@umaryland.edu.
3. You will be responsible for requesting an official transcript to be forwarded to the Office of Registration Services at the end of the term (once grades have been posted). Any grades posted as an NM will be changed to an F within a semester, so it is very important that the transcript is forwarded to this office for a change of grade.