

NURS 529.01W
Nursing Informatics
(MSN Program)



Texas A&M University
Texarkana

Fall 2011

**TEXAS A&M UNIVERSITY-TEXARKANA
MSN PROGRAM**

- COURSE NUMBER:** NURS 529.01W
- COURSE TITLE:** Nursing Informatics
- CREDIT HOURS:** 3 semester hours (3-0)
- PREREQUISITES:** None
- OFFICE HOURS:** 1:30 – 4:30 PM Monday through Thursday and/or by appointment.
- COURSE FACULTY:** Shirley Garick, Ph.D., RN, FAIHQ
Professor of Nursing
Department of Nursing
Office: 194
Phone: 903- 223-3177 Fax: 903-223-3107
Email: Shirley.garick@tamut.edu
Office Hours: As posted in office or by appointment.
- REQUIRED TEXTS:** McGonigle, Dee and Mastrian, Kathleen (2012). *Nursing Informatics and the Foundation of Knowledge*. Jones & Bartlett, Sudbury, Ma. ISBN: 978-1-4496-3174-1
- American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author. ISBN: 9781433805615
- COURSE DESCRIPTION:** Provides an overview of the management of information through application of computer, information, and nursing science concepts. Focuses on how nurses employ information technology within clinical practice, administration, education and research settings to improve communication and the delivery of health care. This course enhances the ability of students to apply informatics in the healthcare system. (3 SCH: 3 - 0)
- Student Learner Outcomes:** The following course outcomes apply to successful achievement of this course. The student must be able to demonstrate the ability to:
1. Identify principles of computing in nursing.
 2. Utilize appropriate terminology related to informatics in nursing
 3. Evaluate computer program systems and informatics through online discussions, quizzes and research paper.
 4. Write an APA style research paper regarding a current topic in informatics.
 5. Demonstrate through verbalization and presentations the ability

to evaluate nursing informatics showing their potential utilization in nursing practice, education and research.

Meeting Student Learning Outcomes:

1. The student must identify not less than 80% of principles involved with computing in nursing.
2. The student must utilize appropriate terminology related to informatics in nursing 100% of the time in the research paper, online discussions, quizzes.
3. The student will evaluate 2 computer programs as assigned by the faculty person reaching a score of 80% or above on each evaluation.
4. Research Paper must be written in APA style and cover the chosen topic with a grade of 80% or above.
5. All work related to this informatics course including the quizzes must reach the threshold of 80% or above to achieve a passing grade for this course.

Course Outline:

Overview of course

- *Concepts and theories guiding professional practice within Technology*
- *Factors of Change, Complexity and Creativity for Nurse managers/leaders*

Organization and Strategy

- *Organizational structure and analysis within the technological paradigm*
- *Human resource development*
- *Strategic planning within nursing management/leadership; evidence-based practice*
- *Issues/Staffing and scheduling utilizing technological systems*

Risk management, regulatory issues and performance appraisals utilizing technology

- *Principles of technological management for nurse managers/leaders*
- *Risk management issues involved within technology*
- *Quality management and performance appraisals within technological framework*

Understanding the technology system involving evidence based principles and ethical practice for managers/Leaders

- *Changing management paradigms for technology and systems requirements*
- *Understanding the technological impact workforce on management/Leader activities*
- *The impact of technology on ethics for the practice of nursing management/leaders*

Wrap up course

- *The technological workforce*
- *Summation of course topics*
- *Evaluation of course*

Methods of Evaluation:

Discussion Board - Students will reflect, analyze and synthesize the topics offered on discussion board and post researched peer reviewed articles they have researched.

The faculty person will assign via Blackboard email for each student, 1 computer program to evaluate. The evaluation must have a cover sheet and be at least 4 pages in length and in APA style. No abstract or reference pages is needed. It must be double spaced in Ariel 12 point font. Evaluation questions for computer programs are 1 through 7.

1. What type of computer system and hardware do you want?
2. What operating system would you use?
3. The word processing and graphics you would need and why you need them.
4. Do you need spreadsheets and databases and why you need them?
5. Will you be using the World Wide Web?
6. How you will incorporate health care informatics and information systems into your proposed system.
7. How would you evaluate your nursing informatics program?

Managerial Paper

The research paper is to be 20 pages in length, written in APA style with a cover sheet and abstract and references. In this paper you may explain the development of a nursing informatics program which you would like to use in your work environment, to expedite your workplace function and/or hospital function for nurses. When doing this paper you may pick some of the following 8 items as topics for your paper. Remember these are only suggestions. If you have another topic please let your instructor know.

Suggestions:

1. The future of nursing and health care informatics.
2. Problems with security and nursing informatics.
3. Potential of changing HIPAA Laws in relation to Nursing Informatics.
4. Emerging knowledge and Nursing Informatics.
5. Nursing informatics utilized in nursing roles, skills and competencies.
6. Utilizing Nursing informatics in evidence based practice.
7. Nursing informatics and patient's role in Telehealth.
8. Potential loss of privacy and hacking of Electronic Medical Records (EMR)

The exams will be comprehensive and cover everything prior to the date of the exam and it will include content from quizzes. All exams and quizzes will be online.

Course Requirements:	Quizzes.....	15%
	Exams	15%
	Assignments.....	15%
	Research Paper.....	40%
	Discussions online.....	15%
		100%

Grading Scale:

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 59 or below

Student Technical Assistance:

- Solutions to common problems and FAQ's for your web-enhanced and online courses are found at this link: <http://www.tamut.edu/webcourses/index.php?pageid=37>
- If you cannot find your resolution there, you can send in a support request detailing your specific problem here: <http://www.tamut.edu/webcourses/gethelp2.php>
- Blackboard Helpdesk contacts:

Office hours are: Monday - Friday, 8:00a to 5:00p

Kevin Williams (main contact) 903-223-1356 kevin.williams@tamut.edu

Frank Miller (alternate) 903-223-3156 frank.miller@tamut.edu

Nikki Thomson (alternate) 903-223-3083 nikki.thomson@tamut.edu

Technical Requirements

Minimum System Requirements

The following computer system requirements are recommended for an online course:

OS: Windows 2000/XP/Vista; Mac OSX 10.2 & above

RAM: 256 MB, Processor: 2.0 GHz, Free space on HDD: 500MB

Internet Connection: (Broadband/DSL preferred), Dial Up 56k minimum

Browser: Internet Explorer 6 or 7, Mozilla Firefox 2.0, Safari 1.0

Java: Version 6 Update 11 or later

Sound card and speakers

Software Requirements

Pop-up Blockers

All pop-up blockers installed on your computer must be set to allow pop-ups from Blackboard

Java Runtime Environment

You must have the Java Runtime Environment installed. This is a free plug-in for your browser that can be obtained by going to <http://www.java.com>

Additional Plug-ins

You may need additional software based on the content that your instructor posts in their course. Commonly needed applications are:

Microsoft Office 2007/2003/XP Suite/Works (not free software)

Adobe Acrobat Reader (free download)

Windows Media Player (free download)

Real Time Media Player (free download)
Quick Time Media Player (free download)
Macromedia/Adobe Flash (free download)
Macromedia/Adobe Shockwave (free download)

Disability Accommodations: Students with disabilities may request reasonable accommodations through the A&M-Texarkana Disability Services Office by calling 903-223-3062."

Academic Integrity: *Academic honesty is expected of students enrolled in this course. Cheating on examinations, unauthorized collaboration, falsification of research data, plagiarism and undocumented use of materials from any source constitute academic dishonesty and may be grounds for a grade of "F" in the course and/or disciplinary actions. Additional information is in the university catalog.*

A&M-Texarkana Email Address:

Upon application to Texas A&M University-Texarkana an individual will be assigned an A&M-Texarkana email account. This email account will be used to deliver official university correspondence. Each individual is responsible for information sent and received via the university email account and is expected to check the official A&M-Texarkana email account on a frequent and consistent basis. Faculty and students are required to utilize the university email account when communicating about coursework.

Calendar of Complete Course Schedule:

Week 1	<u>Assignment One</u> - orientation and overview of course. Read chapters 1 and 2 (Nursing Science & Foundations of Knowledge/Intro to Information) Look for articles to review on discussion board.
Week 2	<u>Assignment Two</u> - Read chapter 3 and 4. Be prepared for in discussion board questions & describe your workplace computer system.
Week 3	<u>Assignment Three</u> - Chapter 5 and 6. Be prepared for in online discussions & post at least one research article regarding human-technology interface of the future. e.g. robotics etc.
Week 4	<u>Assignment four</u> – Read chapters 7 and 8. Online Quiz will be given over chapters 1,2,3,4,5,6,7 and 8.
Week 5	<u>Assignment Five</u> - Read Chapter 9 and 11. Go to discussion board gather 2 research articles, addressing the topics in chapters 9 & 10, post them on discussion board for comments from your colleagues.
Week 6	<u>Assignment Six</u> - Read Chapters 10 and 12. Each student is to search for one research article for discussion board on Health care Portability Act of 1996 OR Securing health care information for discussion.
Week 7	<u>Assignment Seven</u> - Introduction to Spreadsheets and Databases more information will be given later and read Chapters 13 and 14 for next week's online quiz.
Week 8	<u>Assignment Eight</u> - Discussion of chapters 13/14 and online lecture within the discussion board, then you will have an online Mid- term Exam covering all chapters from 1 through 14.
Week 9	<u>Assignment Nine</u> - Read chapters 15 and 16. Go on line and find one research article for each chapter, 15 and 16. Then write a brief 2 page review of the articles and email them to the faculty person.

Week 10	<u>Assignment Ten</u> - Read chapters 17,18,19,20. There will be an online quiz covering these chapters.
Week 11	<u>Assignment Eleven</u> - Read chapters 22, 23,24. Research one article on Telehealth and place it on the discussion board for comments by colleagues.
Week 12	<u>Assignment Twelve</u> - Read chapters 25,26,27. There will be an online quiz covering these 3 chapters.
Week 13	Happy Thanksgiving
Week 14	<u>Assignment Thirteen</u> - Presentations of Research paper on discussion board and you may email the paper to the faculty.
Week 15	<u>Assignment Fourteen</u> - Finish research paper presentations, if necessary on discussion board and the research paper is due. Online class evaluations due.

***Please note the quizzes and exams will be posted on Thursdays and are due by 5 PM the next Thursday. Please note quizzes and exams will be posted in Course content.**

Participation Policy:

(a) Students are to be prepared with addressing the discussion board topics. This preparedness will include an analysis and synthesis of the topics presented and scholarly inquiry aimed at addressing each area of the discussion. Online Assignments will be presented and discussion board topics will be presented for class input. Students are expected to complete the assignments within each Assignment. Specific instructions for completing each assignment will be included within each Assignment.

(b) Students are to be responsible for their own work and when interacting online must not make any untoward comments such as profane words, personal attacks on your colleagues or any type of offensive materials that would be considered as inappropriate for a graduate online level course.

(c) **Discussion Board Standards:** The student will be on the discussion board a minimum of 2 times per week or more, as needed, since this course is only five weeks you are expected to participating the minimum amount each week. Discussion board content must be complete with thorough analysis and synthesis of materials presented for discussion. Your review of each article or other submission must contain a critical analysis of the topic presented.

Drop Policy: University Drop Policy: To drop this course after the 12th class day, a student must complete the Drop/Withdrawal Request Form, located on the University website (<http://tamut.edu/Registrar/droppingwithdrawing-from-classes.html>) or obtained in the Registrar's Office. The student must submit the signed and completed form to the instructor of each course indicated on the form to be dropped for his/her signature. The signature is not an "approval" to drop, but rather confirmation that the student has discussed the drop/withdrawal with the faculty member. The form must be submitted to the Registrar's office for processing in person, email Registrar@tamut.edu, mail (P. O. Box 5518, Texarkana, TX 75505) or fax (903-223-3140). Drop/withdraw forms missing any of the required information will not be accepted by the Registrar's Office for processing. It is the student's responsibility to ensure that the form is completed properly before submission. If a student stops participating in class (attending and submitting assignments) but does not complete and submit the drop/withdrawal form, a final grade based on work completed as outlined in the syllabus will be assigned.

Potential Resources:

Agency for Healthcare Research and Quality (2009).

(<http://www.ahrq.gov/downloads/pub/evidence>)

American Medical Association (2009). (<http://www.ama-assn.org>)

American Nurses Association (2009). (<http://nursingworld.org/FunctionalMenuCategories>)

American Organization of Critical Care Nurses (2009). (<http://www.aacn.org>)

American Organization of Nurse Executives (2009). (<http://www.aone.org>)

Joint Commission (2009). (<http://www.jointcommission.org>)

Institute for Healthcare Improvement (2009). (<http://www.ihl.org>)

U.S. Department of Veterans Affairs (2009). (<http://www.va.gov>)