

**THE UNIVERSITY OF TEXAS
AT ARLINGTON
SCHOOL OF NURSING**

**N6324-016
Clinical Information Systems**

SYLLABUS

**Spring 2010
Classroom #: Pickard Hall 216**

**The University of Texas at Arlington School of Nursing
DNP Program**

N6390-016 (3 credit Hours, 33 clock hours)

Spring 2010

Select Fridays (see Schedule) 1pm to 3:50pm

Pickard Hall, Room # 216

INSTRUCTOR:

Instructor: Daisha J. Cipher, Ph.D. *(Wed a class)*
Office Hours: By appointment only
Email: cipherconsulting@earthlink.net
Web Site: www.uta.edu/webct *Cipher@uta.edu*

**COURSE WEB SITE OR
WORLD WIDE WEB
SITE:**

All course handouts are available for download via WebCT.
<http://www.uta.edu/webct>

**COURSE
PREREQUISITES:**

Graduate level introductory statistics course

**REQUIRED TEXTBOOKS
& MATERIALS:**

Shortliffe, E.H., & Cimino, J.J. (2006). Biomedical Informatics: Computer Applications in Health Care and Biomedicine. Springer Science.

Additional reading materials will be made available on the 'Handouts' portion of WebCT. See schedule below for dates of assigned reading.

COURSE DESCRIPTION:

This course develops skills and knowledge for an integral role as a clinical expert and leader in planning, developing, implementing, and evaluating clinical information systems (CIS) and information technology in health care settings. Informatics applications that affect health care and nursing will be emphasized. Strategic planning, determining and communicating information needs, administrative uses of information systems, clinical information systems and electronic health record are explored. This course culminates in the development, analysis, and reporting of a simulated CIS research project.

**COURSE LEARNING
GOALS/OUTCOME
OBJECTIVES:**

1. Recognize and describe the structure of clinical information systems.
2. Recognize and describe the ethical issues involving CIS.
3. Develop research questions pertinent to nursing that can be answered via CIS.
4. Develop an IRB proposal to conduct research using CIS.
5. Conceptualize data acquisition, storage, and use.
6. Achieve proficiency in Microsoft Excel 2007.
7. Apply basic data management techniques to integrate CIS.
8. Analyze a database to address research questions pertaining to CIS.

**ATTENDANCE AND
DROP POLICY:**

- Regular class attendance and participation is expected of all students.
- Students are responsible for all missed course information. A DNP student who wishes to change a schedule by either dropping or adding a course must first consult with the DNP Advisor, Dr. Mary

Schira.

The following regulations pertain to adds and drops:

1. A student may not add a course after the end of the late registration.
2. A DNP student dropping a course or resigning from the University after the Census Date but before the final designated drop date for the enrolled semester will receive a grade of W only if at the time of dropping the student is passing the course (has a grade of A, B, or C); if the student has a D or F at the time of dropping, an F will be recorded. Students dropping a course must:
(1) Complete a Course Drop/Resignation Form available on line at http://www.uta.edu/nursing/MSN/drop_resign_request.pdf or MSN/DNP Office Room 605; (2) Obtain faculty signature and current course grade; and (3) submit the form to MSN/DNP Office Room 605.
3. A DNP student who desires to drop all courses for which he or she is enrolled is reminded that such action constitutes a withdrawal from the University. The student should indicate intention to withdraw from all courses by: (1) Completing a Drop/Resignation Form (available online at http://www.uta.edu/nursing/MSN/drop_resign_request.pdf or MSN/DNP Office Room 605; (2) Obtain faculty signature for each course enrolled and current course grade; (3) File the form in the MSN/DNP Office Room 605.
4. DNP students may drop a course up to 12 weeks in the fall or spring semester and up to 8 weeks in a 10-week summer session. Under extreme circumstances, the Dean or Associate Dean of the DNP Program may consider a petition to withdraw after the designated drop date, but in no case may a DNP student selectively drop a course after the drop date and remain enrolled in any other course.

Last Date Drop or Withdraw: - April 2, 2010

**TENTATIVE
LECTURE/TOPIC
SCHEDULE (COURSE
CONTENT):**

Introduction to CIS
Review of Basic Computer Applications
Handouts 1 and 2

In Classroom:
~~January 22~~

Discussion Board: Chapter 1
The Computer Meets Medicine

~~January 29~~
Posts due

Discussion Board: Chapter 2
Biomedical Data

~~February 5~~
Posts due

Discussion Board: Chapter 5
Biomedical Computing

~~February 12~~
Posts due

The Institutional Review Board Process and Proposal
Handouts 3 thru 8

In Classroom:
~~February 19~~
CITI Training Due

~~Designing the IRB Proposal~~
1-2:30

~~Group 1~~
~~Biomed Research~~
~~Investigators~~

Schirgo
modanolo

Dr Cypher
will post Sunday pm
discussion questions

Discussion Board: Chapter 6
System Designs

~~Fri~~
~~February 26~~
Posts due

Discussion Board: Chapter 10
Ethics and Health Informatics

~~March 5~~
Posts due

Learn Excel
by 3/12

Data Management Applications in CIS
Handouts 9 thru 11

Basic Excel - Import/Exporting Data
Learning for Final Project

Discussion Board: Chapter 11
Evaluation and Technology Assessment

In Classroom:
March 12 5pgs
IRB Proposal Due demographic #5
March 26 3 tables
Posts due (enrichment)

Discussion Board: Chapter 12
Electronic Medical Records

~~April 2~~
Posts due

Discussion Board: Chapter 16
Patient Care Systems

Posts due 4/16
~~April 9~~
Posts due

The Role of Nurses in Clinical Information Systems
Handout 12

Guest Speaker

Post due
In Classroom:
April 16

Discussion Board: Chapter 17
Patient Monitoring Systems

April 23
Posts due

Final Project Due
(Report and Final Dataset)

April 30

done
Email merged data set
thru private mail to Dr. Coker

This course requires the completion of all assigned projects, in addition to class participation via WebCT. **Moreover, this class requires proficiency in Microsoft Word and Microsoft Excel.** Students who need to achieve proficiency in these software applications can register for MS Office training at
<http://www.uta.edu/oit/cs/training/classes/office.php>

There are also online tutorials on the Microsoft website:
<http://office.microsoft.com/training/>

Brief report 3 results:
IRB proposal
5pgs, 12pt font
12pt font, double space
w/ + tables & figures
Intro Medical Results
Discussing "reflections on research"
Answer research question - was there
Excel
email for feedback on sections as needed

Excel

This is a good tutorial on YouTube:

<http://www.youtube.com/watch?v=8L1OVkw2ZQ8>

At the beginning of every week, the instructor will post a question to the Discussion Board that pertains to that week's assigned book chapter. Students will post at least one substantive answer to the Discussion Board by the due date listed on the schedule (above). These answers are recorded and counted toward the "Class Participation" grade listed below (see Course Evaluation section).

5 pages max

*- demographics pg
- at least 2 tables*

set of data
CIS Research Project: This course culminates in the development, analysis, and reporting of a simulated CIS research project. This project is facilitated by the instructor via simulated electronic health records. An IRB proposal will be developed for this simulated project. Subsequently, students will develop a set of research questions, and will perform data manipulation and management to address those questions. A report of the results, in addition to the student's final database, will be due at the end of the semester. *Report + Merged Data Set*

**TEACHING
METHODS/STRATEGIES:**

This course involves online instruction via WebCT, as well as in-class instruction. The class will communicate with one another weekly using the WebCT Discussion Board. In-class discussion will consist of applied tutorials of data management techniques commonly used in CIS.

**GRADE CALCULATION
(COURSE EVALUATION
& FINAL GRADING):**

% of Final Grade

Class Participation via WebCT Discussion Board	20%
CITI Training Completion (passing all modules)	20%
IRB Proposal	20%
CIS Research Project	40%

Report + Merged Data Set

Students with a final grade of 91 to 100 will receive an 'A'
Students with a final grade of 81 to 90 will receive a 'B'
Students with a final grade of 71 to 80 will receive an 'C'
A final grade of <71% constitutes failure.

**STATUS OF RN
LICENSURE:**

All graduate nursing students must have an unencumbered license as designated by the Board of Nursing (BON). It is imperative that any student whose license becomes encumbered by the BON must immediately notify the Associate Dean for the DNP Program, Dr. Mary Schira. Failure to do so will result in dismissal from the DNP Program. The complete policy about encumbered RN license is available online at: <http://www.uta.edu/nursing/grad/unencumbered>

**CONFIDENTIALITY
AGREEMENT:**

You signed a Confidentiality Form in orientation and were provided a copy of the form. Please take your copy of this Confidentiality Form with you to your clinical sites. Please do not sign other agency confidentiality forms. Contact your faculty if the agency requires you to sign their confidentiality form.

**AMERICANS WITH
DISABILITIES ACT:**

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 93112 -- The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans With Disabilities Act - (ADA), pursuant to section 504 of The Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

**STUDENT SUPPORT
SERVICES**

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. They include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at 817-272-6107 for more information and appropriate referrals.

**STUDENT CODE OF
ETHICS**

The University of Texas at Arlington School of Nursing supports the Student Code of Ethics Policy. Students are responsible for knowing and complying with the Code. The Code can be found in the Student Handbook online: <http://www.uta.edu/nursing/hbk/toc.htm>

**ACADEMIC
DISHONESTY:**

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

PLAGIARISM:

Copying another student's paper or any portion of it is plagiarism. Additionally, copying a portion of published material (e.g., books or journals) without adequately documenting the source is plagiarism. If

five or more words in sequence are taken from a source, those words must be placed in quotes and the source referenced with author's name, date of publication, and page number of publication. If the author's ideas are rephrased, by transposing words or expressing the same idea using different words, the idea must be attributed to the author by proper referencing, giving the author's name and date of publication. If a single author's ideas are discussed in more than one paragraph, the author must be referenced at the end of each paragraph. Authors whose words or ideas have been used in the preparation of a paper must be listed in the references cited at the end of the paper. Students are encouraged to review the plagiarism module from the UT Arlington Central Library via <http://library.uta.edu/tutorials/Plagiarism>

BOMB THREATS:

If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

E-CULTURE POLICY:

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning department requirements, registration, financial aid and scholarships, payment of bills, and graduation may be sent to students through email. All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. Students are responsible for checking their email regularly.

NO GIFT POLICY:

In accordance with Regent Rules and Regulations and the UTA Standards of Conduct, the School of Nursing has a "no gift" policy. A donation to one of the UTA School of Nursing Scholarship Funds, found at the following link: [Nursing Scholarship List](#) would be an appropriate way to recognize a faculty member's contribution to your learning. For information regarding Scholarship Funds, please contact the Dean's office.

DNP COURSE SUPPORT STAFF:

Rose Olivier Admin. Assistant, Room 605;
Phone: (817) 272-2329; Fax: (817) 272-2950;
Email: olivier@uta.edu

LIBRARY INFORMATION:

Helen Hough, Nursing Librarian
(817) 272-7429
hough@uta.edu
Research Information on Nursing:
<http://www.uta.edu/library/research/rt-nursing.html>

**MISCELLANEOUS
INFORMATION:**

Inclement Weather (School Closing) Inquiries:

Metro (972) 601-2049

Fax Number - UTA School of Nursing: (817) 272-2950

Attn: DNP in Nursing Office

UTA Police (Emergency Only): (817) 272-3003

Mailing Address for Packages:

UTA School of Nursing

C/O (insert faculty name)

411 S. Nedderman Drive, Pickard Hall

Arlington, Texas 76019-0407