# Course Syllabus

Course Number: NURS 5385
Course Title: Information Systems Life Cycle

| | |
|---|---|
| Instructor's Name: | Cheryl D. Parker, PhD, MSN, RN-BC, CNE, FHIMSS |
| Office Address: | 3900 University Blvd, BRB 2250, Tyler, TX 75799 |
| Telephone: | 214-766-1326 |
| Preferred Email: | cparker@uttyler.edu |
| Office Hours: | See Canvas calendar for virtual office hours—one-on-one hours by appointment |

## Course Description

This course is focused on preparing the students for all facets of information system procurement and implementation. A primary focus of the course is on the tactical skills and competencies required to implement information systems in various healthcare settings. This course prepares the student to function as a project team member during the implementation of a clinical information system and to participate in system evaluation and maintenance.

**Course Credit and Clock Hours:** 3 credit hours (3 clock hours per week)

**Class Time:** Primarily asynchronous in Canvas Learning Management System. Any scheduled live web meetings will be recorded for those who cannot attended in real-time.  Those who cannot participate in real-time discussion may have a 2-3 paragraph assignment in addition to watching recorded webinar.

**Prerequisites:** None

## Nursing Organization Mappings

- American Association of Colleges of Nursing (AACN) MSN Essentials V & VII
- Quality and Safety Education for Nurses (QSEN) Competencies:  Teamwork and Collaboration & Informatics

## Student Learning Outcomes

Upon successful completion of this course, the student will be able to:

1. Explain the major methodologies used for developing a strategic plan.
2. Assume a project team member role during system selection, implementation, and testing.
3. Plan for regular system evaluation, maintenance, support and eventual decommission.
4. Develop and effectively utilize strategies to obtain user acceptance and satisfaction data.
5. Design and present a project plan based on a healthcare case study including budget and timeline.

6.  Design an education plan for a system implementation project.

## Course Topics

Based on the 2018 ANCC Test Plan for Certification in Nursing Informatics and the 2017 Healthcare Information and Management Systems Society (HIMSS) Certified Associate in Health Information and Management Systems (CAHIMS) Certification.

| Module | Subject | Topics/Assignment |
|--------|---------|-------------------|
| 1 | Introduction, Objectives and course overview | Introduction discussion – What are your goals for this class? Start of term knowledge assessment survey Webinar Introduction Discussion #1 – Experience with project implementation |
| 2 | System Development Life Cycle (SDLC) | Strategic Planning: Understand components of an IT strategic plan Strategic planning techniques<br>• Benchmarking<br>• Balanced scorecards<br>• KPIs<br>Discussion #2 – Experience with strategic planning, balanced score card and KPIs<br>Planning & Analysis<br>• Governance<br>• Needs assessment<br>• Planning education<br>• Benefits measurement<br>• Vendor relationships and contracting<br>Application #1: Needs assessment<br>• Designing and Building<br>• Concepts related to clinical content build (e.g., dashboards, templates and flowsheets)<br>• Usability<br>• ADA<br>• Providing report criteria for collection of data and information<br>• Designing systems to support workflow<br>Discussion #2 Evaluation of usability and ADA<br>Implementing and Testing:<br>• Phases of testing<br>• Testing Processes<br>• System Implementation<br>• User Education<br>Application #3: Developing an Education Plan<br>Monitoring, Maintaining, Supporting, and Evaluating:<br>• Systems maintenance (e.g., enhancements, break/fix)<br>• User experience (e.g., usability, human factors, Human-Computer Interaction [HCI])<br>• Supporting end-users (e.g., optimization, user manual, Help Desk tickets)<br>• Evaluating user adoption and satisfaction (e.g., face-to-face feedback, surveys) |

| | | |
|---|---|---|
| | | • Monitoring system performance (e.g., performance reports) |
| 3 | Project Management | Team Project: Given a case study, each group will create a written project plan and present it in Week 13 via web conference.  It will be recorded for students who can't attend. Project Process:<br>• Initiating<br>• Planning<br>• Executing<br>• Monitoring and Controlling<br>• Transition<br>Managing:<br>• Integration<br>• Scope<br>• Time<br>• Cost<br>• Quality<br>• Human Resources<br>• Communication<br>• Risk<br>• Procurement<br>• Project Stakeholder<br>Discussion #3 Case Study Analysis |
| 4 | Final Data Presentation | Peer Critique and Discussions of Project Presentation<br>Present final project plan and provide feedback to peers |
| Finals | | Final Exam (Week 8-13)<br>End of term knowledge assessment survey |

## Required Textbooks

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, D.C.: Author.
ISBN-13: 978-1433805615
ISBN-10: 1433950618
Sengstack, P. P., & Boicey, C. M. (2015). *Mastering informatics: A healthcare handbook for success*. Indianapolis, IN: Sigma Theta Tau International.
ISBN-13: 978-1938835667
ISBN-10: 1938835662

Optional:

McGonigle, D. & Mastrian, K. G. (2018) *Nursing informatics and the foundation of knowledge 4th edition*. Burlington, MA:  Jones & Bartlett Learning

ISBN-13: 978-1284121247
ISBN-10: 1284121240

Additional textbooks and resource materials to be determined

## Course Schedule

The course schedule, including assignment due dates and last day to withdraw without penalty, may be found in the course schedule posted in the "Syllabus" in Canvas.

Census Date: January 28, 2019

Mid-Term Exam: March 10, 2019

Last Date to Withdraw: April 1, 2019

Final Exam Date: May 4, 2019

## Grades and Grading

Specific guidelines and grading criteria for all assignments are in the Modules. Final grades for the course will be determined based upon the following point assignments:

> A - 90-100
> B - 80-89
> C - 70-79
> D - 60-69
> F - Below 60

The weighted average of the graded assignments must be 80% or above to pass the course. All assignments should be submitted prior to the pre-determined due date, unless prior arrangements have been made with the course faculty and a new due date determined.

**Late policy:** 5% will be deducted each day an assignment is past due unless prior arrangements have been made with your course faculty.

**Group Member Feedback and Grading**

For group projects, the instructor may allow for members to provide feedback on contributions and work effort of other group members. This feedback may be taken into account in issuing individualized grades for group projects. In other words, the input of your group members may positively or negatively affect your grade on these projects.

**Rounding:** Grades will not be rounded when calculating the average (79.5 is not rounded to 80 and 89.5 is not rounded to 90). Students are expected to achieve an average of 80% (B) to successfully complete the course.

| Criteria for Evaluation: | Percentage of Grade |
|---|---|
| Discussions | 20% |
| Mid Term (12.5%) and Final Quiz (12.5%) | 25% |
| Application Assignments – 3 (5% each) | 15% |
| Group Project Plan | 25% |
| Pre-post class knowledge assessment surveys | 5% |
| **Total** | **100%** |

## Assignments

### Academic Integrity

Students are expected to assume full responsibility for the content and integrity of all academic work submitted. Refer to the *Graduate Nursing Student Guide* for policies regarding conduct and discipline.

### Assignments Turn-In Process

All assignments will be submitted through the "Assignments" tab or can also be submitted in the Modules tab in Canvas unless otherwise indicated. Please use the following process to prepare and submit assignments:

- Prepare your assignment using Microsoft Word unless otherwise directed.
- Access the "Assignments" tab (or in the Modules tab) and click on the Assignment link.
- If you need more instructions on "how-to" submit files through the assignment link, please read the Canvas Help for Students located in the Tools area.

Assignments are a major part of the course work and should receive appropriate attention. All assignments must meet the standards for graduate level work (spelling, punctuation, syntax, grammar, content, and most of all scholarliness). It is expected that all assignments will be completed in a **timely manner**, unless arrangements have been made by you and your faculty. Five (5) points will be deducted for each day an assignment is late.

### Written Assignments

TurnItIn is a feature provided by Canvas that is designed to detect plagiarism or non-original student work. This feature is set up so that when you submit papers, they are automatically sent through TurnItIn. The program checks your work against a comprehensive database of source material including previous students' work and other papers and materials found on the web. An originality report will be generated that indicates the percentage of non-original material (text that matches existing sources) found in your paper. The purpose of using TurnItIn in your course is to ensure you are writing original papers and to encourage you and all students to properly attribute all sources used.

All submitted written material (papers, assignments, examinations, etc.) are the property of the School of Nursing and will be maintained in an archived file at UT Tyler.

### Participation Expectations and Discussions Assignments

- Each student participant is responsible for participating in the asynchronous discussions for each Discussions post. This participation will include posting answers to questions posed by the instructor and replying to other participants' postings.
- Discussion postings should be made in a timely manner. Deadlines are listed in the Course Schedule. Please note that all discussion postings must be completed by 11:59pm Central Standard Time on the due date.
- Participants should plan on entering the Discussion area at least three times a week to read and comment on others' postings. Posting answers to the questions posed in the Discussion area should be done in advance of the deadline to allow other participants to have the opportunity to comment.

The requirements for postings and responses to your peers are listed in each discussion assignment and may vary based on the discussion.

You may check your grades at any time on the Canvas website. Feedback on assignments will be provided via the gradebook.

## Quizzes

Quizzes are for your learning and to help you keep up your skills at completing multiple choice exams as all certifications in informatics require timed multiple-choice examinations.  Quizzes in this class will be open book and students will have three attempts with the highest score received by due date recorded.

## Pre/Post Class Knowledge Assessment Survey

Each of the classes in the informatics program will have a pre/post knowledge assessment survey to assist the faculty in understanding your own perception of your knowledge growth during this course.  Points are awarded for completion of both surveys not on the content of the survey.  Completion of only one survey is not sufficient to obtain the indicated points.

# Email Communications

All students are required to use their student **Patriot email accounts** for all correspondence (Approved FO: 2/03). To communicate by email within the course with other participants or all participants, click the Tools link on the left side of the Canvas frame. Click Send E-mail to send a message. You are able to send messages to All Users or Select Users in the course, including the instructor. Faculty will not respond to personal email (e.g. Gmail, Yahoo, Hotmail, AOL, ATT accounts, etc.). Please comply with University Policy regarding electronic communication.  Your instructor's work email is listed in Canvas as a backup option.

Questions or problems other than technical problems may be submitted to the email address above. For technical issues, please refer to the Technical Information/Technical Support in this Syllabus.

# Technical Information

The following information should be included in your syllabus to give direction to the students on how to obtain technical support should problems arise with Canvas. Also included is a short list of browser plug-ins and other suggested applications that students should make sure they have installed and/or updated.

## Technical Support

If you experience technical problems or have a technical question about this course, please consult Campus Computing Services via the web at http://www.uttyler.edu/ccs/help.php or via email at itsupport@patriots.uttyler.edu or phone 903.565.5555.

When you email IT Support, please be sure to include a complete description of your question or problem including:

- The title and number of the course.
- The page in question.

- If you get an error message, a description and message number.
- What you were doing at the time you got the error message.

You may also visit the Help Tab in Canvas for helpful information.

**Plug-ins and Helper Applications**

UT Tyler online courses use Java, JavaScript, browser plug-ins, helper application and cookies. It is essential that you have these elements installed and enabled in your web browser for optimal viewing of the content and functions of your online course.

- **Adobe Reader** allows you to view, save, and print Portable Document Format (PDF) files.
  http://get.adobe.com/reader/
- **Java Runtime Environment** (JRE) allows you to use interactive tools on the web.
  http://www.java.com/en/download/
- **Adobe Flash Player** allows you to view content created with Flash such as interactive web applications and animations.
  http://get.adobe.com/flashplayer/
- **Zoom** is a FREE cloud-based service that provides a simple solution for online meetings and video conferences. You can use Zoom to communicate with your instructor and classmates. Follow this link to set up your account: https://uttyler.zoom.us
- **QuickTime** allows users to play back audio and video files.
  http://www.apple.com/quicktime/download/
- **Windows Media Player** allows you to view, listen and download streaming video and audio.
  http://windows.microsoft.com/en-US/windows/products/windows-media-player
- **RealPlayer** allows you to view and listen to streaming video and audio.
  http://www.real.com/

## Netiquette Guide

"Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and informal "rules of the road" of cyberspace. Review and familiarize yourself with the guidelines provided.
http://www.learnthenet.com/learn-about/netiquette/index.php

https://www.uttyler.edu/online/files/netiquette.pdf

## University Policies (Updated January 2018)

http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf

**UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do. Students Rights and Responsibilities To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/rightsresponsibilities.php

**Campus Carry**

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at http://www.uttyler.edu/about/campus-carry/index.php

**UT Tyler a Tobacco-Free University**

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

**Grade Replacement/Forgiveness and Census Date Policies**

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar.

Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid State-

**Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

**Disability/Accessibility Services**

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at http://www.uttyler.edu/disabilityservices, the SAR office located in the University Center, # 3150 or call 903.566.7079.

**Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

**Student Absence for University-Sponsored Events and Activities Revised 01/18**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

**Social Security and FERPA Statement**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

**Emergency Exits and Evacuation**

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services. Student Standards of Academic Conduct Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but 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.

i. "Cheating" includes, but is not limited to:

- copying from another student's test paper;
- using, during a test, materials not authorized by the person giving the test;
- failure to comply with instructions given by the person administering the test;
- possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
- using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
- collaborating with or seeking aid from another student during a test or other assignment without authority;
- discussing the contents of an examination with another student who will take the examination;
- divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
- substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
- paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
- falsifying research data, laboratory reports, and/or other academic work offered for credit;
- taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
- misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

ii. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.

iii. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.

iv. All written work that is submitted will be subject to review by plagiarism software.

**UT Tyler Resources for Students**

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu
- The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254)

**UT Tyler School of Nursing Computer Requirements**

http://www.uttyler.edu/nursing/college/student-resources.php