Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should <u>not</u> be used to purchase course materials.

COURSE SYLLABUS

NURS 718

INFORMATICS, TECHNOLOGY AND TRENDS FOR TRANSFORMING HEALTH CARE

COURSE DESCRIPTION

This course explores various applications of informatics as well as current trends for health care delivery across a variety of settings. Students will analyze and evaluate information systems and patient care technology, as well as the impact on the delivery of care in all practice settings. Advanced clinical applications of technology will be emphasized with various populations including those in clinical settings, aggregate populations at risk and the community as a whole. Students will explore utilization of technology applicable to advanced practice such as: guiding evidenced-based practice, providing patient education, promoting health and wellness, improving clinical workflow, and administrative applications. The advanced role related to information systems will be examined, including working with interdisciplinary groups to select and maintain nursing information systems and serving as a credible resource for legal and ethical situations related to information technology.

RATIONALE

This course is a required part of the DNP curriculum. Accreditation standards require the student to be versed in current healthcare technology. This course helps prepare the student for the advanced practice role, which includes decision-making with regard to healthcare technologies.

I. PREREQUISITE

For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE

Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with basic audio/video output equipment

B. Internet access (broadband recommended)

C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES

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

A. Describe various reimbursement models to deliver quality patient care utilizing resources effectively. (DNP *Essentials* IV, V; NONPF 2014 Technology 1 & 4, Health Delivery System 1, 5, & 6; PLO 2*)*

B. Apply informatics to direct patient care, community/population health, and patient education. (DNP *Essentials* IV, VII; NONPF 2014 Technology 1-5; Health Delivery Systems 4-7; PLO 3 & 4)

C. Analyze delivery formats utilizing informatics applications such as the electronic health record, tele-health, and medical coding systems. (DNP *Essentials* IV; NONPF 2014 Technology 1-5, Health Delivery Systems 4-6; PLO 4)

D. Select pertinent information systems and technology to support clinical decision making and improve patient outcomes. (DNP *Essentials* II, IV; NONPF 2014 Technology 1-5, Health Delivery System 1-7, Leadership 1-5; PLO 1-6)

E. Apply principles of quality improvement and patient safety measures to various populations. *(*DNP *Essentials* II, VII; NONPF 2014 Quality 1-5; PLO 2)

F. Analyze ethical/legal issues related to changing reimbursement models and technology in healthcare from a Christian worldview. (DNP *Essentials* V; NONPF 2014 Technology 2, 4, Policy 1-3, Ethics 1-3; PLO 7)

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and presentations

B. Course Requirements Checklist

After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (2)

Discussion boards are collaborative learning experiences. Therefore, the student is required to create a thread in response to the provided prompt for each forum. Each thread must be comprehensive, demonstrate course-related knowledge, and be written at the graduate level. In addition to the thread, the student is required to reply to 2 other classmates' threads.

D. Case Studies (3)

The student will be required to analyze 3 major Case Studies. The Case Study questions must be thoroughly addressed and in current APA format. The student must utilize the textbooks and other sources as needed to fully address questions.

E. HMIS Project

The student will complete a formal paper addressing implementation of an HMIS project suitable to his/her workplace/practice. The project is divided into 3 parts:

Part 1 – Introduction

In Part 1 of this assignment, the student will develop a vision and goals in keeping with his/her organization's mission. The student must use the Tan & Payton textbook and at least 3 other scholarly sources in this section. Part 1 must be 5–7 pages in current APA format, excluding the title and reference pages.

Part 2 – Planning

In Part 2 of this assignment, the student will create a detailed plan for the system being developed for his/her organization. The student must use the Tan & Payton

textbook and at least 5 other scholarly sources in this section. Part 2 must be 10–12 pages in current APA format.

Part 3 – Implementation

In Part 3 of this assignment, the student will utilize information from the first 2 sections and lay out a comprehensive implementation plan. This must be a plan that could be followed in implementing a new system. The student must use the Tan & Payton textbook and at least 5 other scholarly sources. Part 3 must be 10–12 pages in current APA format, excluding the title and reference pages.

An abstract summary of the project should be uploaded to the student portfolio after final edits from instructor feedback.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist		10
Discussion Board Forums (2 at 100 pts ea)		200
Case Studies (3 at 100 pts ea)		300
HMIS Project		
Part 1 – Introduction		100
Part 2 – Planning		200
Part 3 – Implementation/Evaluation		200
	Total	1010

B. Scale

A = 940–1010 A- = 920–939 B+ = 900–919 B = 860–899 B- = 840–859
C+ = 820–839 C = 780–819 C- = 760–779 D+ = 740–759 D = 700–739
D- = 680–699 F = 0–679

C. Disability Assistance

Students with a documented disability may contact Liberty University Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

VII. BIBLIOGRAPHY

American Association of Colleges of Nursing (2006, October). *The essentials of doctoral education for advanced nursing practice.* Washington, DC: Author.

American Nurses Association (2008). *Nursing informatics: Scope and standards of practice.* Silver Spring, MD: Springhouse. ISBN: 9781558102569.

Gagnon, M., Desmartis, M., Labrecque, M., Car, J., Pagliari, C., Pluye, P., & Legare, F. (2012). Systematic review of factors influencing the adoption of information and communication technologies by healthcare professionals. *Journal of Medical Systems, 36*(1), 241–277.

Lammintakanen, J., Kivinen, T., Saranto, K., & Kinnunen, J. (2009). Strategic management of healthcare information systems: Nurse managers' perceptions. *Studies In Health Technology & Informatics, 146,* 86–90.

Levy, S., & Heyes, B. (2012). Information systems that support effective clinical decision making. *Nursing Management – UK, 19*(7), 20–22.

Porter-O'Grady, T. (2003). Of hubris and hope: Transforming nursing for a new age.

Nursing Economics, 21(2), 59–64.

Procter, P., & Woodburn, I. (2012). Encouraging nurses to develop effective electronic documentation. *Nursing Management – UK, 19*(6), 22–24.

Radhakrishnan, K., Jacelon, C., & Roche, J. (2012). Perceptions on the use of telehealth by homecare nurses and patients with heart failure: A mixed method study. *Home Health Care Management & Practice, 24*(4), 175–181.

LIBERTY UNIVERSITY.

COURSE SCHEDULE

NURS 718

Textbooks: Tan & Payton, *Adaptive Health Management Information Systems* (2010).
Zaccagnini & White, *The Doctor of Nursing Practice Essentials* (2017).

MODULE/ WEEK	READING & STUDY	ASSIGNMENTS	POINTS
1	Tan & Payton: chs. 1–2, 14 Zaccagnini & White: ch. 4 1 presentation 1 website	Course Requirements Checklist Class Introductions DB Forum 1	10 0 100
2	Tan & Payton: chs. 3, 13, Research Brief I, Technology Brief I 1 presentation	DB Forum 2	100
3	Tan & Payton: ch. 4 1 presentation	Case Study 1	100
4	Tan & Payton: chs. 5–6, Technology Brief III, Technology Brief IV 1 presentation	Case Study 2	100
5	Tan & Payton: chs. 8–9 1 presentation	Case Study 3	100
6	Tan & Payton: chs. 10–11 1 presentation	HMIS Project Part 1 – Introduction	100
7	Tan & Payton: chs. 7, 12 1 presentation	HMIS Project Part 2 – Planning	200
8	Tan & Payton: ch. 14 1 presentation	HMIS Project Part 3 – Implementation/Evaluation	200
		TOTAL	**1010**

DB = Discussion Board

NOTE: Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final module/week ends at 11:59 p.m. (ET) on **Friday**.