

Institutional Effectiveness Report 2020-2021

Program: Nursing BSN

College and Department: Whitson-Hester School of Nursing

Contact: Barbara Jared, Director

Mission: The mission of the Whitson-Hester School of Nursing (WHSON) is a focused commitment on meeting the health care needs of the diverse population of the Upper Cumberland Region of Tennessee. The goal of the nursing program is to prepare graduates with a commitment to life-long success as nursing leaders in rural and urban areas who are committed to professional nursing standards, open to the changes occurring in a global health care system, and motivated to improve the health status of individuals, groups, and communities.

The University mission was approved by the Tennessee Tech Board of Trustees on June 26, 2018 as follows, "Tennessee's technological university creates, advances, and applies knowledge to expand opportunity and economic competitiveness. As a STEM-infused, comprehensive institution, Tennessee Tech delivers enduring education, impactful research, and collaborative service." Through the department's mission, there is a commonality to quality of instruction. The WHSON has played a significant role in the University's commitment to meet the economic needs of the region. The mission of the WHSON further reflects the mission of the University through the preparation of "graduates with a commitment to life-long success as nursing leaders in rural and urban areas who are committed to professional nursing standards, open to the changes occurring in a global health care system, and motivated to improve the health status of individuals, groups and communities." The mission and goals are reviewed and revised by the nursing faculty to reflect current trends in nursing and healthcare.

Program Goals:

- PG 1: The Whitson-Hester School of Nursing will maintain compliance with required agencies.
- a. The Whitson-Hester School of Nursing will demonstrate ongoing accreditation through the Commission on Collegiate Nursing Education (CCNE).
 - b. The Whitson-Hester School of Nursing will demonstrate ongoing full approval of the Tennessee State Board of Nursing.
- PG 2: The WH-SON program will maintain strong graduation rates.
- PG 3: Graduates of the Whitson-Hester School of Nursing will be licensed to practice nursing.

Student Learning Outcomes:

By graduation, the undergraduate will demonstrate proficiency in the following areas:

- SLO 1: Students of the Whitson-Hester School of Nursing will graduate with the ability to synthesize nursing knowledge into evidence-based practice.

Intended Outcomes / Objectives:

By graduation, the undergraduate will demonstrate proficiency in the following areas:

1. Integrate knowledge and theories from the natural and social sciences, liberal arts, humanities, and nursing to develop a generalist professional nursing practice (LO-1)
2. Provide professional nursing care, which includes health teaching and health promotion to individuals, families, groups, and communities throughout the life span along a continuum of health, illness, and/or disability within various health care settings (LO-2)
3. Identify and apply knowledge of basic organizational and systems leadership for safe and high-quality patient care (LO-3)
4. Evaluate and utilize theory and research-based knowledge in nursing practice for beginning scholarship for evidence-based practice (LO-4)
5. Demonstrate professional nursing practice through critical thinking, clinical judgment, therapeutic nursing intervention and communication utilizing information management and patient care technology within the practice of the baccalaureate generalist (LO-5)
6. Demonstrate basic knowledge of healthcare policy, finance, and regulatory environments, including local, national, and global trends (LO-6)
7. Develop collaborative relationships and inter-professional communication with health care professionals and the health care consumer to promote and advance positive patient health care outcomes founded on evidence-based practice (LO-7)
8. Utilize evidence-based practice for health promotion, risk reduction, disease prevention, and illness management of individuals, families, groups and communities (LO-8)
9. Demonstrate quality nursing practice based on professional values, incorporating ethical, moral and legal standards, and human diversity (LO-9)

A departmentally developed curriculum map can be found in Appendix 1 that shows the connections between courses and student learning outcomes.

Assessment Methods:

PG 1: Compliance with National Accreditation Agencies and the TN State Board of Nursing

1. CCNE Accreditation and Approval of the Tennessee State Board of Nursing

The Commission on Collegiate Nursing Education (CCNE) – CCNE is “an autonomous accrediting agency, officially recognized by the U.S. Secretary of Education as a national accreditation agency. The Commission ensures the quality and integrity of baccalaureate, graduate, and residency programs in nursing. CCNE serves the public interest by assessing and identifying programs that engage in effective educational practices. CCNE is a voluntary, self-regulatory process, which supports and encourages continuing self-assessment of nursing programs and supports continuing growth and improvement of collegiate professional education and post-baccalaureate nurse residency programs.” <http://www.aacn.nche.edu/ccne-accreditation/about/mission-values-history>.

The Tennessee State Board of Nursing – the TN State Board of Nursing’s mission and responsibilities “center around three broad functions – licensure, education, and practice. The

board prescribes the minimum curriculum for all nursing programs on ground, online, distance, or via other electronic means and annual approves schools of nursing meeting board standards. Schools not meeting standards are investigated and the board is authorized to place the school on conditional approval or close the program if standards are not met.”

<http://health.state.tn.us/boards/Nursing/index.htm>.

Assessment data relative to CCNE accreditation and TN State Board of Nursing approval is reviewed by the Dean of the WH-SON and disseminated to the WH-SON Faculty Organization for discussion and input. The Dean of the WH-SON is an Ex-officio member of the WH-SON Faculty Organization. Faculties receive copies of completed accreditation reports. Faculty Organization meets monthly during the academic year. The annual report to the TN State Board of Nursing is accessible to faculty when requested.

Benchmark: The WHSON will maintain continuous accreditation status.

PG 2: Graduation rates from the WHSON program will meet or exceed university rates

1. WHSON and University Graduation Rates

Provides a comparison between the WH-SON graduates and the rest of the university. This assessment can identify changes in student retention and attrition compared to the institution. WHSON and University graduation rates comparisons are reviewed annually by the Dean of the WH-SON and shared with faculty during Faculty Organization meetings.

Benchmark:

1. A minimum of 70% of BSN students (BSN and ABSN) will complete Upper Division Nursing in 6 semesters or less.
2. Post Licensure (RNBSN) Program Completion Rate for full-time students: 70% of full time RN-BSN students will graduate within 4.5 semesters, beginning with enrollment in the first nursing (NURS) course.
3. Post Licensure (RNBSN) Program Completion Rate: for part-time students 70% of part time RN-BSN students will graduate within 9 semesters, beginning with enrollment in the first nursing (NURS) course.

PG 3: Graduates of the Whitson-Hester School of Nursing will be licensed to practice nursing.

1. NCLEX-RN Pass Rates

BSN graduates cannot practice nursing without initial licensure. The National Council of State Boards of Nursing (NCSBN) is an independent, not-for-profit organization serving as the “vehicle through which boards of nursing act and counsel together on matters of common interest.” NCSBN was created to “guard the safety of the public” through member boards seeking to “ensure that nurses entering the workforce have the necessary knowledge and skills to practice.” To meet this goal, NCSBN develops “psychometrically sound and legally defensible nurse licensure examinations consistent with current nursing practice.” Specific to the WH-SON nursing program, our BSN graduates are eligible to test for the NCLEX-RN licensure examination upon graduation from the program and completion of a criminal background check. Utilizing

current changes in U.S. health care delivery and nursing practice and the acuity level of patient care, the NCSBN Board of Deans evaluate the NCLEX-RN passing standards every three years, adjusting the difficulty level of the exam. Therefore, it is the preferred comparison benchmark for the WH-SON versus comparison to peer Tennessee institutions. The NCLEX-RN is completed through Computerized Adaptive Testing, with a minimum of 75 questions up to 265 questions answered based on the graduate's ability to answer questions reflective of varying cognitive levels with emphasis placed on application or higher levels of cognitive ability described by Bloom's taxonomy for the cognitive domain. Graduates will receive a pass/fail if they have met the passing standards set by NCSBN. www.ncsbn.org/181.htm.

Assessment data relative to NCLEX-RN pass rates is reviewed by the Dean and disseminated to the WH-SON Faculty Organization. As the NCLEX-RN passing standards change along with changes to the NCLEX-RN test blueprint, the blueprint is reviewed by individual Course Administrators as well as the WH-SON Curriculum Committee for gaps in content, concepts, etc. with necessary course and/or curriculum revisions when warranted. Three faculty of the WH-SON attend national updates on the NCLEX-RN and then in turn disseminate current information to the Faculty Organization.

CCNE, the WHSON accrediting body, requires an NCLEX pass rate of 80% or higher, the TN Board of Nursing requires a pass rate of 85% and the WHSON set their benchmark at 95%.

Benchmark: BSN graduates will maintain a first time NCLEX pass rate of 95% or greater.

SLO 1: Students of the Whitson-Hester School of Nursing will graduate with the ability to synthesize nursing knowledge into evidence-based practice.

1. HESI RN Exit Exams

HESI Exams – Health Education Systems, Inc. (HESI) is a testing company specializing in producing valid and reliable tests for nursing schools. They offer custom, specialty and exit exams. HESI exams are computerized based and timed, comparable to the delivery format of the NCLEX-RN. In addition, the exam questions are modeled after the NCLEX-RN test blueprint and can be utilized as a predictor for NCLEX-RN success. Each type of exam can provide individual student evaluation as well as class aggregate evaluation data.

Benchmark: Scores on the HESI RN Exit Exam will be equal to or higher than the national average in each category as reflected in the 9 Program Objectives

Results:

PG 1: Compliance with National Accreditation Agencies and the TN State Board of Nursing

Commission on Collegiate Nursing Education (CCNE) Accreditation - In 2009, the WH-SON completed a self-study in preparation for an onsite evaluation by its accrediting agency, the Commission on Collegiate Nursing Education (CCNE). At the October 2010 meeting of CCNE, the agency determined that the School met all four of its accreditation standards with no compliance concerns. CCNE accreditation standards include an assessment of compliance with University mission and standards. Consequently, CCNE granted full accreditation of the School's baccalaureate degree program in nursing, retroactive from February 5, 2009, when the on-site evaluation took place, until December 31, 2019. Submission of

the Continuous Improvement Performance Report (CIPR) was sent to CCNE on December 1, 2014 and full approval on July 8, 2015.

WH-SON completed the self-study process for re-accreditation in December 2018. The self-study process affords the program the opportunity to identify its strengths, its performance with respect to student achievement, and areas for improvement, as well as its plans to address continuous improvement. The CCNE re-accreditation Site Visit took place February 20-22nd, 2019. The CCNE Site Visitors found that the WH-SON BSN program met all four required standards. The accreditation was final in Fall of 2019.

Full approval of the Tennessee State Board of Nursing without deficiencies. The most recent on-site visit occurred in Spring 2017 for the Baccalaureate Degree Program with a report due in December of each year.

The Continuous Improvement Process Report (CIPR) will be due on December 21, 2022. The BSN and MSN accreditation visit will take place in Fall 2024.

Benchmark is met with continuous CCNE accreditation and ongoing TN State Board of Nursing approval.

PG 2: Graduation rates from the WHSON program will meet or exceed university rates.

The upper division program is organized for completion in 5 semesters (BSN) and 4 semesters (ABSN); the rates are based on completion within 6 semesters to account for students who may have to repeat a course. Cohorts are identified by admission semester and year. In the case that a student must repeat a semester, they are still identified as a member of their admitting cohort. Students are excluded who have identified factors such as family obligations, relocations, financial barriers, and decisions to change major or transfer to another institution of higher education. The completion rate for the most recent calendar year is above 70%.

Benchmark is met for graduation rates for the pre-licensure BSN and ABSN and the post-licensure RNBSN tracks.

Pre-Licensure Graduation Rate

	Admitted 2016		Admitted 2017		Admitted 2018		Admitted 2019	
Traditional BSN	Spring %	Fall %	Spring %	Fall %	Spring %	Fall %	Spring %	Fall %
Rate by Semester	97% (60/62)	96% (46/48)	95% (57/60)	88% (42/48)	100% (61/61)	94% (49/52)	93% (57/61)	84% (49/58)
Number of Exclusions	3	10	5	7	6	13	4	5
Graduation Rate by Calendar Year	2018: 96%		2019: 92%		2020: 97%		2021: 89% **	

** Major disruption due to Covid-19 and local natural disaster

ABSN Pre-Licensure Graduation Rate

The total number of students that graduate/complete within 120% of expected time is divided by the number of students admitted to the program. The ABSN program is designed for completion in 4 semesters; the rates are based on completion within 6 semesters to account for students who may have to repeat a course. Students are excluded who have identified factors such as family obligations, relocations, financial barriers, and decisions to change major or transfer to another institution of higher education.

Accelerated BSN Completion Rates

	Admitted 2017	Admitted 2019	Admitted 2020
Accelerated BSN	Fall 2017	Summer 2019	Summer 2020
Rate	36/38	23/28	26 /28
Number of Exclusions	1	4	1
Graduation Rate by Calendar Year	2018: 95%	2020: 82%	2021: 93%

Post-Licensure Rate**RN-BSN Program Completion Rate**

Whitson-Hester School of Nursing RN-BSN completion rates are determined by marking the start date of the first nursing course and the completion date of the last nursing course in the program calculated at 150% of the full-time and part-time program length to account for students who may need to repeat a course. Students are excluded who have identified factors such as family obligations, relocations, financial barriers, and decision to change major or transfer to another institution of higher education.

1. Program Completion Rate: 70% of full time RN-BSN students will graduate within 4.5 semesters, beginning with enrollment in the first nursing (NURS) course.
2. Program Completion Rate: 70% of part time RN-BSN students will graduate within 9 semesters, beginning with enrollment in the first nursing (NURS) course.

Post-Licensure Graduation Rate (RNBSN) :

	Admitted 2017			Admitted 2018			Admitted 2019			Admitted 2020		
RN-BSN	Spring%	Summer%	Fall%	Spring%	Summer%	Fall%	Spring%	Summer%	Fall%	Spring%	Summer%	Fall%
Rate by Semester	100% (3/3)	100% (2/2)	0	100% (3/3)	0	0	100% (2/2)	50% (2/4)	0	100% (1/1)	100% (2/2)	
Number of Exclusions	1	0	0	2	2	0	0	0	1	0	2	
Graduation Rate by Calendar Year	Completion Rate 100%			Completion Rate: 100%			Completion Rate: 66%			**		

*Fall 2020 students are currently enrolled

PG 3: Graduates of the Whitson-Hester School of Nursing will be licensed to practice nursing.

NCLEX Pass Rates

The NCLEX-RN pass rate for each campus/site and track is 95% or higher for first-time takers for the most recent calendar year.

	2018	2019	2020	2021
TTU WHSON BSN Graduates	99%	96%	99%	93.85%
	115 graduates	126 graduates	139 graduates	130 graduates
	1 failure	5 failures	1 failure	8 failures
	(F17/S18)	(F18/Sp19)	(F19/S202)	(F2020/S2021)
National Average, First Attempt, U.S. Educated, BSN	88.29%	88.18%	87.53%	82.48%

Benchmark is met for first time NCLEX pass rates and exceeds the national average.

SLO 1: Students of the Whitson-Hester School of Nursing will graduate with the ability to synthesize nursing knowledge into evidence-based practice.

The HESI exam scores provide a reflection of student progression on identified learning outcomes throughout the students' time in the nursing program. HESI Exam Categories include the AACN Essentials of Baccalaureate Nursing Education, Nursing Process, Client Needs, NLN Education Competences, and QSEN. Aggregate student outcomes for the HESI RN Exit Exam and the Mid-curricular Exam are provided for curriculum and course revisions.

Benchmark met with Composite HESI RN Exit scores greater than the National Mean Score. This is an improvement over 2020 scores as Objectives 5, 7 and 9 were below the national average. These scores improved to above the national average in 2021.

Composite HESI RN Exit Exam

February 2020		September 2020		February 2021		September 2021		March 2022	
TTU Mean Score	HESI National Mean Score	TTU Mean Score	HESI National Mean Score	TTU Mean Score	HESI National Mean Score	TTU Mean Score	HESI National Score	TTU National Score	HESI National Score
924	856	894	856	881	856	895	848	893	848

Integrate knowledge and theories from the natural and social sciences, liberal arts, humanities, and nursing to develop a generalist professional nursing practice (LO-1)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Liberal Education for EBP	916	836	903	840	880	840

Provide professional nursing care, which includes health teaching and health promotion to individuals, families, groups, and communities throughout the life span along a continuum of health, illness, and/or disability within various health care settings (LO-2)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Provider of Care	885	840	897	845	894	845
BSN NSG Practice	880	842	896	844	894	844

Identify and apply knowledge of basic organizational and systems leadership for safe and high-quality patient care (LO-3)

HESI Category	Feb. 2021		September 2021		March 2022	
	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Leader for Quality Care and Pt Safety	871	840	890	844	883	844

Evaluate and utilize theory and research-based knowledge in nursing practice for beginning scholarship for evidence-based practice (LO-4)

HESI Category	Feb. 2021		September 2021		March 2022	
	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Scholarship for EBP	872	840	906	842	902	842

Demonstrate professional nursing practice through critical thinking, clinical judgment, therapeutic nursing intervention and communication utilizing information management and patient care technology within the practice of the baccalaureate generalist (LO-5)

HESI Category	Feb. 2021		September 2021		March 2022	
	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Clinical Judgement Clinical Decision Critical Thinking	877	838	891	845	893	845

Demonstrate basic knowledge of healthcare policy, finance, and regulatory environments, including local, national, and global trends (LO-6)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Healthcare Policy	882	846	806	830	979	860

Develop collaborative relationships and interprofessional communication with health care professionals and the health care consumer to promote and advance positive patient health care outcomes founded on evidence-based practice (LO-7)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Designer/Manager/Coordinator of Care	845	837	874	840	908	840
Interprofessional Communication	841	825	830	836	863	836

Utilize evidence-based practice for health promotion, risk reduction, disease prevention, and illness management of individuals, families, groups and communities (LO-8)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Clinical Prevention and Population Health	873	840	888	846	877	846

Demonstrate quality nursing practice based on professional values, incorporating ethical, moral and legal standards, and human diversity (LO-9)

	February 2021		September 2021		March 2022	
HESI Category	TTU Score	National Score	TTU Score	National Score	TTU Score	National Score
Professional & Professional Values	894	857	787	842	852	842

Modification for Improvement:

PG2: The WH-SON program will maintain strong graduation rates.

Benchmark:

1. A minimum of 70% of BSN students (BSN and ABSN) will complete Upper Division Nursing in 6 semesters or less.
2. Post Licensure (RNBSN) Program Completion Rate for full-time students: 70% of full time RN-BSN students will graduate within 4.5 semesters, beginning with enrollment in the first nursing (NURS) course.
3. Post Licensure (RNBSN) Program Completion Rate: for part-time students 70% of part time RN-BSN students will graduate within 9 semesters, beginning with enrollment in the first nursing (NURS) course.

Program Goal 2 related to graduation rates was met for all three tracks of the BSN program. However, the Post-Licensure RNBSN group decreased to 75% completion rate in 2019. The WHSON Admissions and Credits Committee will review the Admissions process and discuss progression issues in this track. We do anticipate ongoing issues with completion with this population of students as they are licensed as Registered Nurses and have been impacted with increased workloads secondary to COVID 19. Many of these students have been required to work under forced overtime decreasing the time allowed for school work.

PG3: Graduates of the Whitson-Hester School of Nursing will be licensed to practice nursing.

Benchmark: BSN graduates will maintain a first time NCLEX pass rate of 95% or greater.

The WHSON NCLEX pass rate remained well above the state and national average for 2021. However, the 93.85% WHSON NCLEX pass rate dropped below our internal benchmark of 95%. All of these students were impacted by COVID in their upper division course and clinical work. The WHSON NURS

4460 Licensure Prep course has been revised to address areas of concern. For example, a Medical Surgical HESI standardized exam was added to the course as the majority of the NCLEX exam is Med/Surg related. This exam provides additional, valuable information to assist faculty NCLEX advisors in working with students to develop an NCLEX plan that extends into a post-graduation plan to prepare for NCLEX.

In 2023 the test plan for NCLEX will have a dramatic shift and a new exam: NextGen will begin. The students admitted into Upper Division Nursing in Fall 2021 was the first group to sit for this NextGen NCLEX exam.

In anticipation of these changes and the need for our faculty to begin writing exam questions to meet the NextGen test plan we have supported two faculty to attend faculty development workshops related to this topic. One of those faculty (Dr. Hurley) teaches the Licensure Prep course for the graduating seniors and the second faculty (Dr. Geist) was chosen by the National League for Nursing Assessment Services Division Content Review Committee.

As part of her role with the NLN, Dr. Geist began faculty development within the WHSON in the Summer 2021 to prepare faculty for use of the clinical decision-making model in exam writing for the new exam. She will continue to provide 1-2 faculty development sessions for the WHSON each semester through 2023. Additionally, she will meet in small groups of faculties who are currently teaching the 2023 graduating class. For example, Fall 2021 she met with all faculty teaching at the sophomore 2 level in adjusting a percentage of their exams introducing the new types of exam questions. In spring 2022 she will meet with all faculty teaching the junior students, and continue through to graduation

Appendices

1. Curriculum Map

Appendix 1: Curriculum Map

Required Courses and Experiences	WHSON BSN Program Objectives								
	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9
NURS 2300	I		I	I	I				
NURS 3240	R	I	R	R	I	I	R	I	M
NURS 3250	R	I	R	M	R	R	R	I	R
NURS 3260	I	R	I	R	R	I	R	R	R
NURS 3261	M	R	M	M	R	M	R	R	R
NURS 3270	R	R	R	R	R	I	R	I	I
NURS 3271	M	R	M	M	R	M	R	R	R
NURS 3280	R	R	R	M	M	M	R	R	M
NURS 3290	M	R	R	I	R	R	R	R	M
NURS 3350	R	R	R	M	R	R	R	R	M
NURS 3361	M	R	M	M	R	M	M	M	R
NURS 3370	R	I	R	M	R	M	I	R	R
NURS 3371	R	R	M	M	M	M	M	R	M
NURS 3390	M	R	R	R	R	R	R	R	M
NURS 4000	R	R	M	I	R	I	I	R	R
NURS 4001	R	R	R	I	M	M	R	M	R
NURS 4100	M	R	R	I	R	R	R	R	R
NURS 4101	R	I	R	M	M	M	M	M	M
NURS 4230	R	R	R	M	R	M	R	R	R
NURS 4300	R	R	R	R	R	M	R	R	M
NURS 4430	R	R	R	R	M	M	R	M	R
NURS 4431	M	M	M	M	R	M	M	M	R
NURS 4450	R	R	R	M	M	M	R	R	R
NURS 4451	M	M	M	M	R	M	M	M	R
NURS 4460	M	A		M				M	R
NURS 4800	R	R	R	R	I	R	R	R	I
Other: Exit Exam RNExit		A		A A					

