

**TRANSFER GUIDE FOR  
 NORTHWESTERN MICHIGAN COMMUNITY COLLEGE**

**Associate in Applied Science Degree  
 DIAGNOSTIC MEDICAL SONOGRAPHY  
 Effective Fall 2008**

Home Page	Contact	Phone
<a href="http://www.ferris.edu/htmls/colleges/alliedhe/">http://www.ferris.edu/htmls/colleges/alliedhe/</a>	Michelle Weemaes Program Coordinator Diagnostic Medical Sonography College of Allied Health Sciences Ferris State University 200 Ferris Drive Big Rapids MI 49307-2740 weemaesm@ferris.edu	1-800-GO-BULLDOGS or 231/591-2261

This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris State University. The information on this guide is subject to change; students should contact the College of Allied Health Sciences to keep informed of changes (see "contact" above). Final responsibility for verifying all transfer information lies with the students.

**QUALIFICATION CHECKLIST FOR APPLICATION**

**For Admission to the Professional Sonography Sequence:** Students should officially apply to the professional sequence **between January 15 and January 30** if they will have their qualifications completed by the end of the previous Fall Semester for consideration for the following Fall semester start.

Please refer to the **Policy for Admission to the Professional Sequence for CAHS Clinical Programs** and to the **Frequently Asked Question (FAQ) for the Application and Admission Process**. These links can be accessed at the College of Allied Health Sciences Home Page. See below.

COURSE / QUALIFIERS	Minimum CREDITS	Minimum GRADE REQUIRED
Academic Status: • Minimum Standard: Maintain GPA of 2.5 or higher	NA	NA
Math Competency: • ACT Subscore of 24 or higher <u>or</u> • MATH 115 ( <b>*in 2 attempts</b> )	NA 3	NA C
ENGL 150 English 1 ( <b>*in 2 attempts</b> )	3	C
Medical Terminology Competency • MRIS 102 Orientation To Medical Vocabulary ( <b>*in 2 attempts</b> )	1	C
BIOL 109 Basic Human Anatomy & Physiology ( <b>*in 2 attempts</b> )	4	C
PHYS 130 Concepts of Physics ( <b>*in 2 attempts</b> )	4	C

CAHS Pre-Professional Advisor: Linda Kuk  
 Contact Information: [kukl@ferris.edu](mailto:kukl@ferris.edu) 1-800-GO-BULLDOGS, ext. 2270; Office: VFS 210B

Be sure to watch the Sonography Website for Program updates. Application Guidelines & Forms can be accessed on the CAHS Website: <http://www.ferris.edu/htmls/colleges/alliedhe/index.cfm>

\*Please refer to the Sonography Progression Policy for guidelines regarding repeated courses. Available at the Sonography website: [http://www.ferris.edu/htmls/colleges/alliedhe/program\\_template.cfm?ProgramID=8](http://www.ferris.edu/htmls/colleges/alliedhe/program_template.cfm?ProgramID=8)

The following is a list of courses students must complete to earn the degree. Community college equivalents are listed below and may be taken prior to transferring to Ferris. If a program will accept a course as a substitution, the word "sub" will follow the community college course number. Blank spaces in the community college column indicate there are no course equivalents or substitutions available.

REQUIRED	COURSE TITLE – FSU PREREQUISITES SHOWN IN BRACKETS ( )		FSU HOURS	COURSE AT Northwestern CC
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**COMMUNICATION COMPETENCE: 9 CREDITS REQUIRED**

ENGL	150	English 1	3	ENG 111
ENGL	250	English 2 (ENGL 150 grade of C- or higher required)	3	ENG 112
<b>Recommended:</b> COMM	105	Interpersonal Communication	3	
<b>Also Accepted:</b> COMM	221	Small Group Decision-making		
	121	Fundamentals of Public Speaking		

**QUANTITATIVE SKILLS: PROFICIENCY OR COURSE REQUIRED**

*MATH	115	ACT – Math subscore of 24 or higher or MATH 115 grade of C		MTH111 or 121
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**SOCIAL AWARENESS: 3 CREDITS REQUIRED**

**CULTURAL ENRICHMENT: 3 CREDITS REQUIRED**

**SCIENTIFIC UNDERSTANDING: 8 CREDITS REQUIRED**

*BIOL	109	Basic Human Anatomy & Physiology	4	sub BIO106
*PHYS	130	Concepts of Physics (Math 110 C- or 19 ACT or 460 SAT)	4	PHY 105

**CAHS CORE REQUIREMENTS: 5 CREDITS REQUIRED**

CCHS	101	Orientation to Health Care	3	
CCHS	102	Safety Issues in Health Care	1	
CCHS	103	Clinical Skills	1	
*MRIS	102	Orientation to Medical Vocabulary or Medical Terminology Competency		HAH 101
ISYS	105	Introduction to Microcomputer Systems and Software or Computer Competency		CIT 120B, 124B & 128

**COURSES TO BE COMPLETED AT FERRIS STATE UNIVERSITY**

**SONOGRAPHY MAJOR: 54 CREDITS REQUIRED**

SONO	100	Introduction to Diagnostic Medical Sonography	1	
SONO	102	Introduction to Sonographic Imaging	1	
SONO	104	Introduction to Ultrasound Physics	3	
SONO	105	Sonography Physics Laboratory	1	
SONO	111	Sonography Pathophysiology of Abdominal Organs	2	
SONO	112	Abdominal Imaging Laboratory	1	
SONO	115	Sonography Cross Sectional Anatomy	1	
SONO	117	Introduction to Sonographic Interpretation	2	
SONO	121	Introduction to OB/GYN Imaging	3	
SONO	122	OB/GYN Imaging Laboratory	1	
SONO	131	Hemodynamic and Doppler Principles	1	
SONO	132	Hemodynamic and Doppler Laboratory	1	
SONO	280	Clinical Internship 1	8	
SONO	281	Small Parts and Invasive Procedures	4	
SONO	282	Clinical Internship II	8	
SONO	283	OB/GYN Imaging II	4	

SONO	284	Clinical Internship III	8	
SONO	285	Sonographic Interpretation II	4	