



MASTER COURSE OUTLINE

A. DMSG 2425 Clinical Ultrasound Internship I

B. COURSE DESCRIPTION:

Students are assigned to various clinical rotations where they gain hands-on experience under the direction and supervision of assigned clinical preceptors. Students will focus on becoming proficient in the scanning of abdominal organs, non-cardiac chest, superficial structures, pelvis, obstetrics, and vascular systems. Students will expand scanning and patient care skills and as the semester progresses more clinical responsibilities will be given.

Prerequisite(s): DMSG 1411, DMSG 1412, AND one of these two (DMSG 1410, DMSG 1415).

(9 Cr – 0 lect, 9 lab)

C. *Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):

- ☒ ILO 1: critical thinking (*Core Theme Goal 2*)
- ☐ ILO 2: awareness of the larger global community (*Core Theme Goal 7 or 8*)
- ☐ ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ☐ ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Clinical internship in an ultrasound department located in a hospital or clinic, performing and observing various ultrasound procedures.

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

<u>GOAL TYPE</u>	<u>OBJECTIVES</u>	<u>OUTCOMES</u>
	Students will be able to	The student will successfully
<u>*Critical Thinking</u>	• gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.	1. participate in the day-to-day operations of an ultrasound department.

<u>CS</u>	- communicate effectively with sonographers, nurses, radiologists, and other healthcare staff. - collaborate in problem-solving activities to support patient flow and case efficiency. - demonstrate respectful, professional behavior in all team interactions. - contribute to a positive clinical environment by supporting peers and staff as needed.	1. display teamwork in an ultrasound department.
<u>CS</u>	- prepare patients appropriately for each type of exam. - select correct transducers and technical settings for each anatomical area. - acquire required protocol images for abdominal, pelvic, OB, superficial structures, chest (noncardiac), and vascular studies. - evaluate images for clarity, accuracy, and diagnostic completeness.	1. perform an examination of an abdominal and pelvic organs, gravid uterus, superficial structures, noncardiac chest and vascular procedures.
<u>CS</u>	- optimize images using gain, TGC, depth, and other machine settings. - label images according to departmental and accrediting-body standards. - store and export images to PACS or reporting software appropriately. - verify that all required images are present and properly documented.	1. record and process for display the images necessary for a diagnostic ultrasound examination.
<u>CS</u>	- identify anatomical structures and confirm normal or abnormal findings. - correlate sonographic patterns with potential clinical conditions. - differentiate normal variants from pathological changes. - summarize preliminary impressions based on image evaluation (within sonographer scope of practice).	1. interpret ultrasound exams that are performed in an ultrasound department.
<u>CS</u>	- explain typical sonographic appearances of normal organ systems. - recognize sonographic signs associated with common pathologies (e.g., gallstones, cysts, DVT, masses). - differentiate benign from suspicious patterns when reviewing images. - document descriptive terminology accurately in image comments and reports.	1. describe normal and pathological conditions on sonograms that are routinely examined in an ultrasound department.
<u>CS</u>	- collect relevant clinical history through interview and chart review. - measure anatomical structures using correct landmarks and techniques. - document findings clearly using standardized reporting terminology. - ensure accuracy and completeness of all report entries before submission.	1. record patient history, measurements, and ultrasound findings on a sonography report.

<u>CS</u>	- communicate pertinent positive and negative findings verbally when required by protocol. - provide clear, concise preliminary information to assist physician interpretation. - use appropriate medical terminology when presenting findings. - clarify exam limitations or technical issues that may affect interpretation.	1. translate ultrasound findings to a reading physician.
<u>CS</u>	- demonstrate proper patient identification, communication, and privacy practices. - apply safe patient-handling techniques, including mobility assistance and infection-control measures. - monitor patient comfort and safety throughout the examination. - respond appropriately to emergent clinical situations within the sonographer's scope.	1. conduct appropriate patient care in a hospital or clinical setting.

G. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

H. COURSE CODING INFORMATION:

Course Code X/Class Maximum 20; Letter Grade

Revision date:

AASC Approval date: 05/12/26

*These five MnTC Goals have been identified as Riverland Community College Core Themes. Every course in the Riverland Community College curriculum shall meet outcomes from one of these themes.

**These five MnTC Goals have been identified as Riverland Community College Disciplines. Riverland's MnTC courses also shall meet outcomes from a Discipline Area.

NOTE: The Minnesota Transfer Curriculum "10 Goal Areas of Emphasis" are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

*Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7A, 7B, 7A/B
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

**Riverland Community College Discipline Areas	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6