Edgewood College Curriculum for the Medical Science Major with a Sonography Concentration

Fall Semester – Freshman Year	Credits	Spring Semester – Freshman Year	Credits
MATH 114A Precalculus A: College Algebra (M)	3	¹ CHEM 120 General Chemistry (S)	4
MATH 114B Precalculus B: Trigonometry Or B or better in high school Trig.	2	COMM 100 Oral Communication (O)	4
PHILOS 101 Logic: Critical Thinking (T)	3	ENG 110 College Writing (W)	4
COR I	3	Gen Ed (Select: A, B, C, H, or R with D, E, G, Q)	3-4
Gen Ed (Select: A, B, C, H, or R with D, E, G, Q)	3-4		
Total Credits	14-15	Total Credits	15-16

Fall Semester – Sophomore Year	Credits	Spring Semester – Sophomore Year	Credits
BIO 155 Human Cell Biology & Genetics (S,U)	4	BIO 210 Anatomy & Physiology I	4
CHEM 121 General Chemistry II (S)	4	PHYSICS 130 General Physics (S)	4
COR II	3-4	^a PHIL 442 Health Care Ethics (P)	4
Gen Ed (Select: A, B, C, H, or R with D, E, G, Q)	3-4	BIO 251 Intro to Biology Research I (I)	3
Total Credits	14-16	Total Credits	15

Fall Semester – Junior Year	Credits	Spring Semester – Junior Year	Credits
BIO 211 Anatomy & Physiology II	4	BIO 410 Pathology (K)	3
PHYSICS 131 General Physics II (S)	4	BIO 202 Medical Terminology	2
PSYCH 101 Intro to Psychology (J)	4	PSYCH 345 Life Span Development	4
Gen Ed (Select: A, B, C, H, or R with D, E, G, Q)	3-4	COR III CHEM 400: Ethics & Resp. in Sci. Research	1
*Apply for internship by December 1		Gen Ed (Select: A, B, C, H, or R)	3-4
Total Credits	15-16	Total Credits	13-14

¹ Chemistry 120 or 121 sequence can be started at any time depending on math placement.

The courses listed above in italics are part of Edgewood College general education requirements. The students apply to the School of Diagnostic Medical Sonography in the Fall semester of their junior year at the University of Wisconsin's Hospitals and Clinics (UWHC). The UWHC internship is a very competitive program with excellent certification and employment success and this curriculum has been designed to specifically improve Edgewood College students' likelihood of acceptance. Interested students should seek advice from their major advisor as to how to improve their chances of admission to the UWHC program. The students will interview around the time of spring break in their junior year, and if accepted, they will continue their education at UWHC in their final 2 years. If the students are not accepted into the program, the students can wait to the following December to reapply or work toward graduating with a biology major. The students who become Biology majors will have enough time to complete the remaining required research requirement and courses for the Biology major (BIO 151, 353, 401, 402, 480) and 1 of the following courses (BIO 206, 275, 333, 430, or 450) in their fourth year at Edgewood College.

Additional Requirements:

- Students are required to have completed their Certified Nursing Assistant certification (CNA) and the Health-Care Provider CPR certification (expired CPR certification is acceptable). Students are recommended to complete their CNA certification in their Freshman year so that they can use this certification to gain clinical practice experience.
- Clinical experience in patient care is required prior to acceptance in the UWHC program. Experience caring for the sick is
 beneficial in that it prepares you for clinical practice and such experience can be obtained through employment (required CNA certification)
 or volunteer activities in nursing homes, hospitals, clinics including urgent care, trauma centers, and imaging centers. The UWHC requires a
 minimum of 100 hours of clinical practice experience.
- Students are required to shadow a sonographer for a minimum of 4-8 hours prior to application to UWHC. Please talk to your major advisor to request a shadowing experience through UWHC. Students are encouraged to shadow general sonography, echocardiography, and radiography to make an informed decision and to facilitate a clear understanding of the differences between fields.
- Students are required to have an overall GPA of 3.0 on a 4-point scale for all pre-professional coursework. In addition, a minimum of "C" grade must be earned in each prerequisite courses, which includes several courses listed above except for courses listed as "COR or Gen Ed".
- To maximize your acceptance into the clinical internship, students should have their CNA and CPR certification, minimum 100 hours of patient care experience, and shadowing hours completed <u>prior</u> to your application to UWHC. All pre-internship classes need to be completed prior to beginning your clinical internship at UWHC.

^a Medical Law requirement for UWHC fulfilled by PHIL 442 or RS 442. Only post baccalaureate students should take RS 442 (R).

UWHC Curriculum for Sonography Internship

Students have the option of receiving training to two areas of sonography: general sonography and echocardiography. Prior to the start of the UWHC internship, students must choose one of these two options. The curricula for both options is included below.

UWHC Curriculum for General Sonography

FALL – Year 1		SPRING – Year 1	
C L SCI 310 Intro to Diagnostic Medical Sonography	3	C L SCI 312 Abdominal Sonography II	3
C L SCI 311 Abdominal Sonography I	3	C L SCI 321 Ob/Gyn Sonography II	3
C L SCI 313 Clinical Education I	3	C L SCI 323 Sonographic Physics & Instrumentation	3
C L SCI 320 Ob/Gyn Sonography I	3	C L SCI 324 Clinical Education II	3
C L SCI 450 Vascular Sonography I	3	C L SCI 451 Vascular Sonography II	5
Total Credits	15	Total Credits	15

UWHC Curriculum for General Sonography - Summer year 1

C L SCI 322 Ob/Gyn Sonography III	3
C L SCI 325 Specialized Sonography	3
C L SCI 326 Clinical Education III	3
	9

UWHC Curriculum for General Sonography

FALL – Year 2		SPRING – Year 2	
C L SCI 319 Abdominal Sonography III	2	C L SCI 457 Clinical Education V	4
C L SCI 402 Intro to Fetal Echocardio graphy	1	C L SCI 458 Seminar in Advanced Medical Imaging	3
C L SCI 452 Clinical Education IV	3	C L SCI 460 Seminar in Professional Development	3
C L SCI 453 Seminar in Ob/Gyn	3	C L SCI 463 Seminar- Management & Education	3
C L SCI 454 Intro to Fetal Echocardio graphy	3		
CLSCI 455 Vascular Sonography III	3		
Total Credits	15	Total Credits	13

UWHC Curriculum for General Sonography - Summer year 2

C L SCI 464 Intro Neurosonography	3
	6

$UWHC\ Curriculum for \underline{Echocardiography}$

FALL – Year 1		SPRING – Year 1	
C L SCI 310 Intro to	3	C L SCI 340	2
Diagnostic Medical		Embryology of the	
Sonography		Heart	
C L SCI 454 Intro to Fetal	3	C L SCI 341 Adult	3
Echocardio grap hy		Echo-Valvular Heart	
		Disease	
C L SCI 337 Clinical	3	C L SCI 323	3
Education I		Sonographic Physics	
		& Instrumentation	
C L SCI 320	4	C L SCI 342 Clinical	3
Cardiovascular Principles		Education II	
C L SCI 450 Vascular	3	C L SCI 451 Vascular	5
Sonography I		Sonography II	
Total Credits	16	Total Credits	14

$UWHC\ Curriculum for \underline{Echocardiography}\ - Summer year 1$

C L SCI 345 Pediatric Echocardiography I C L SCI 346 Adult Echo Cardiomyopathies C L SCI 347 Clinical Education III	3 3 3
	9

UWHC Curriculum for Echocardiography

FALL – Year 2		SPRING – Year 2	
C L SCI 435 Adult Echo- Advanced Pathology	3	C L SCI 457 Clinical Education V	4
C L SCI 436 Pediatric Echocardiography II	3	C L SCI 458 Seminar in Advanced Medical Imaging	3
C L SCI 438 Clinical Education IV	3	C L SCI 460 Seminar in Professional Development	3
C L SCI 437 Stress Echocardiography	3	C L SCI 463 Seminar- Management & Education	3
CLSCI 455 Vascular Sonography III	3		
Total Credits	15	Total Credits	13

UWHC Curriculum for Echocardiography - Summer year 2

C L SCI 440 Clinical Education VI	3
C L SCI 441 Special Procedures in Echocardiography	3
	6

Notice: Upon acceptance to the program all students must submit to criminal background checks, drug screening and a physical exam. Failure or refusal to submit to the required testing will result in an incomplete application. Incomplete applications are not considered for acceptance into the program. If the results of the drug screen show a positive level of any non-prescribed controlled substance, the individual will be deemed unqualified for placement and the offer rescinded. All license and registry agencies have eligibility standards for their applicants. These standards address the question of an applicant's conviction of a felony or misdemeanor. The student is responsible for ensuring their license / registry eligibility. If you have any questions regarding your eligibility, contact the American Registry of Diagnostic Medical Sonographers – www.ardms.org

For more information about this major and the School of Diagnostic Medical Sonography at the University of Wisconsin Hospitals and Clinics, please visit http://biology.edgewood.edu/Academics/Pre-Health-Pathways/Pre-Medical-Sonography

Questions about the Medical Science Major? Please contact Dr. Brenda del Moral, Biological Sciences Department, School of Arts and Sciences, <u>BdelMoral@edgewood.edu</u>, (608) 663-4283, Office in Sonderegger Science Center, room 327