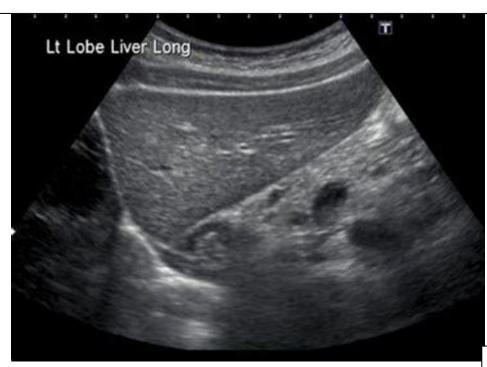


2024-2025 Diagnostic Medical Sonography Student Handbook



Revised: 03/29/2024

Associate of Applied Science, Diagnostic Medical Sonography Program

Associate of Applied Science, Diagnostic Medical Sonography Program

The Bucks County Community College Diagnostic Medical Sonography Program started in 2022. The program follows standards set by the Joint Review Committee on Education in Diagnostic Medical Sonography and in 2023, the program received a 5-year accreditation from the Commission on Accreditation of Allied Health Education Programs. The college is accredited by The Middle States Commission on Higher Education.

http://www.msche.org

https://www.bucks.edu/sonography

https://www.jrcdms.org/ https://www.caahep.org/

Disclaimer: These program policies and regulations are subject to change at the discretion of the Program Director and faculty.

Associate of Applied Science, Diagnostic Medical Sonography Program

Department Contacts:

Elianne Crossland, B.A., RDMS (AB, OB/GYN), RVT Program Director, (267) 685-4952 Elianne.Cossland@bucks.edu

Sheila Levine, A.A.S., RDMS (AB, OB/GYN, BR) Clinical Coordinator, (702) 292-6987 Sheila.Levine@bucks.edu

John Lee, B.A., RDMS (AB, OB/GYN), RVT Part-Time Faculty John.Lee@bucks.edu

Cori Sell, M.S., RDMS (AB, OB/GYN), RVT, RMSKS Part-Time Faculty Cori.Sell@bucks.edu

Clinical Sites

All clinical sites are listed on page 32.

Disability Accommodations:

In compliance with the Bucks County Community College policy and equal access laws, appropriate academic accommodations can be made for students eligible for such support. Students are encouraged to register with the Accessibility Office (215-968-8463) to verify their eligibility for appropriate accommodations. Please speak to your instructor about any requests for academic accommodations or other concerns as early in the semester as possible.

Non-Discrimination Statement:

Bucks County Community College does not discriminate in its educational programs, activities or employment practices based on race, color, national origin, sex, sexual orientation, disability, age, religion, ancestry, veteran status, union membership, or any other legally protected category. This policy is in accordance with state law, including the Pennsylvania Human Relations Act, and with federal law, including Title VI and Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973. Americans with Disabilities Act of 1990 (ADA), the ADA Amendments Act of 2008 (ADAAA), Sections 504 of the Rehabilitation of 1973 and Section 508 of the Rehabilitation Act, Revised 2017.

PROGRAM MISSION AND GOALS

Program Mission

The mission of the Diagnostic Medical Sonography Program is to provide each student with the instruction, skills, and learning experiences to become a compassionate, knowledgeable, and competent entry-level sonographer in the abdomen-extended and obstetrics & gynecology concentrations.

Program Goals:

To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the abdomen-extended and obstetrics & gynecology sonography concentrations.

By the end of the program, students will be able to:

- 1. Demonstrate critical thinking skills during the performance of sonographic procedures to provide optimum diagnostic services.
- 2. Perform sonographic procedures appropriately and accurately recording all anatomic and physiologic information for interpretation by a physician.
- 3. Demonstrate effective communication skills with patients and all members of the healthcare team
- 4. Conduct themselves in a professional manner.

Bucks County Community College A.A.S Diagnostic Medical Sonography Curriculum by Semester

Semester 1 – Summer	Credits
COLL101 – College Success Seminar	1
MEDA120 – Medical Terminology	3
COMM110 – Effective Speaking	3
Semester 2- Fall	
*MATH120 – College Algebra	4
BIOL181 – Anatomy and Physiology I	4
PSYC110 – Introduction to Psychology	3
COMP110 – English Composition I	3
Semester 3- Spring	
BIOL182 – Anatomy and Physiology II	4
PHYS106 – Physics A	4
COMP111 – English Composition II	3
Arts and Humanities Elective	3
Semester 4- Summer	
DXMS100 – Introduction to Sonography/Patient Care	3
DXMS101 – Cross-Sectional Anatomy in Sonography	3
Semester 5- Fall	
DXMS200 – Physics and Instrumentation in Sonography I	2
DXMS201 – Sonography of the Abdomen with Lab	4
DXMS202 - Sonography of Superficial Parts/Vascular Structur	res with Lab 3
DXMS210 – Clinical Experience in Sonography I	3
Semester 6- Spring	
DXMS212 – Physics and Instrumentation in Sonography II	2
DXMS211 – Sonography of OB/Gyn with Lab	4
DXMS215 – Clinical Experience in Sonography II	3
Semester 7 – Summer	

Associate of Applied Science, Diagnostic Medical Sonography Program DXMS220 – Clinical Experience in Sonography III

3

*Math 120: *Prerequisite*: Math placement test score of 7 or better or Math 103 (C or better)

Bucks County Community College Associate of Applied Science, Diagnostic Medical Sonography Program

Clinical Experience Schedule:

Fall Semester Clinical Experience I: 8 am-4 pm: Tuesday and Thursday

Spring Semester Clinical Experience II: 8 am-4 pm: 24 hours/week, Tuesday, Thursday, Friday

Summer Semester (2nd Year) Clinical Experience III: 8 am-4 pm 32 hours/week, Monday to Thursday

DIAGNOSTIC MEDICAL SONOGRAPHY COURSE DESCRIPTIONS

<u>DXMS 100</u>: Introduction to <u>Sonography/Patient Care</u>: This course introduces the profession of sonography and the role of sonographers in healthcare. The history of sonography, patient care techniques, infection control, ethical and legal issues, and proper communication skills is discussed.

<u>DXMS 101: Cross-Sectional Anatomy in Sonography</u>: This course requires the students to learn cross-sectional anatomy of the body in the transverse, longitudinal, and coronal planes. Emphasis is placed on how the organs and vessels are visualized sonographically for required images.

<u>DXMS 200: Physics and Instrumentation in Sonography I</u>: This course provides the student with the relevant fundamental physical principles as well as the basic instrumentation used in diagnostic ultrasound. The modes of operation, imaging and display techniques that relate to high frequency sound production is discussed.

<u>DXMS 201: Sonography of the Abdomen with Lab</u>: This course provides the student with a comprehensive understanding of the anatomy, physiology, embryology, and pathophysiological processes of the abdominal region. Specific attention is paid to the liver, pancreas, gallbladder, abdomen vasculature, biliary systems, spleen, body cavities, urinary system, abdominal wall/components, and male pelvis.

<u>DXMS 202</u>: Sonography of Superficial Parts/Vascular Structures with Lab: This course involves the application and use of ultrasound in the imaging of superficial and vascular structures. The course provides the student with an understanding of Doppler and color ultrasound in the diagnostic evaluation of vascular disease. Discussions include instrumentation and hemodynamics for vascular sonograms.

<u>DXMS 210: Clinical Experience in Sonography I</u>: Students are assigned to clinical areas and attend clinical education for 16 hours per week. In the clinical setting, the students demonstrate their knowledge in ethical situations, legal issues, patient care situations, obtaining and evaluating sonography images.

<u>DXMS 211: Sonography of OB/GYN with Lab</u>: This course familiarizes students with the pathophysiology of the female reproductive and gynecological system. Pelvic scanning protocols as well as first, second and third trimester of the gravid uterus and fetus are covered. Embryology, chromosomal and congenital anomalies are discussed.

<u>DXMS 212: Physics and Instrumentation in Sonography II</u>: This course explores the physics utilized for image acquisition in Diagnostic sonography and builds on content learned in DXMS200. A more in-depth study of Doppler, artifacts, and safety/biological effects is included.

Bucks County Community College Associate of Applied Science, Diagnostic Medical Sonography Program

<u>DXMS 215: Clinical Experience in Sonography II</u>: This course provides 24 hours per week of clinical education experience. In the clinical setting, the student demonstrates their knowledge in ethical situations, legal issues, patient care situations, independently obtaining and evaluating sonography images when competency has been achieved at an intermediate level.

<u>DXMS 220: Clinical Experience in Sonography III</u>: This course provides 32 hours per week of clinical education experience. The student demonstrates their knowledge in ethical situations, legal issues, patient care situations, obtaining and evaluating sonography images at an advanced level. The student performs a complete diagnostic ultrasound exam independently.

POLICIES, RULES, AND REGULATIONS

This Diagnostic Medical Sonography Program is based on two separate and distinct concepts: technical and ethical. The technical portion deals with the didactic and practical training. The ethical portion governs the student's personal and professional behavior and attitudes.

Upon admission to a Diagnostic Medical Sonography Program, the student is entering a unique world. The rules and customs encountered in the hospital will differ from any you have been subject to before. The primary concern of both employees and students must be for the welfare of the patient.

A student's ethics dictate their behavior and attitudes in the classroom and clinically. Since you are preparing to assume the responsibilities of a professional sonographer, part of this responsibility is to conduct yourself in a dignified manner fitting the medical profession. Carefully study the following pages. These are guidelines by which the student will know and understand what is expected of them.

DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM POLICIES

I. Attendance

- A. Attendance and Punctuality Policy
- B. Holidays
- C. Bereavement Policy
- D. Leave of Absence Policy
- E. Pregnancy Policy
- F. Severe Weather Policy

II. Academic and Clinical Requirements

- A. Technical Standards Policy
- B. Student Advisement
- C. Academic Grading System and Academic Progression Policy
- D. <u>Dismissal and Re-admittance Policy</u>
- E. Eligibility for Clinical Placement
- F. The Clinical Competency Evaluation System
- G. Clinical Competency and Laboratory Proficiency Requirements
- H. Supervision of Study Policy- Direct and Indirect Supervision
- I. <u>Due Dates of Clinical Competencies by Semester</u>
- J. Clinical Experience Grade
- K. Clinical Rotation Policy
- L. Requirements for Graduation

III. Professional Behavior and Conduct

- A. Conduct and Disciplinary Policy
- B. SDMS Code of Ethics Policies
- C. Disciplinary Misconduct
- D. HIPAA Policy
- E. Substance Abuse Policy
- F. Grievance Procedure for Students
- G. Responsibility of Students to Supervising Sonographer
- H. Care of Personal Items
- I. Dress Code

IV. Miscellaneous Policies

- A. Telephone Use Policy/Electronic Device Policy
- B. Meal-time Break Policy
- C. Policy for Equipment Breakage and Student Injuries
- D. Communicable Disease Policy
- E. Policy on Seasonal Influenza Vaccination of Students
- F. Infection Control Policy
- G. Withdrawal from Program

Policy

Bucks County Community College <u>Associate of Applied Science, Diagnostic Medical Sonography Program</u> H. <u>Tuition and Fees</u>

- I. <u>Tuition Refund Policy</u>
- J. Transfer Policy
- K. College Services
- L. Covid-19 Policies

I: Attendance

I.A Attendance and Punctuality Policy

Our curriculum is designed to enable the student to integrate the didactic portion of the program with patient care in a progressive manner. Attendance and promptness to **class and clinical** assignments are **mandatory** and highly valued for the student to receive the best education and complete the program.

Students are expected to attend and participate in all scheduled didactic and clinical education classes. Students should schedule all appointments, medical and other, during times when they are not participating in didactic or clinical education experiences. Students should not attend class or clinical if they have a communicable disease and symptoms, such as fever or vomiting, as stated on page 26 of the Communicable Disease Policy.

If a student is absent, the clinical site must be notified before 8 am, as well as the ultrasound program director and clinical coordinator. If this is not done, it will be considered a no-call, no-show and the student will be penalized for **two** absences that semester.

Student attendance is tracked by Tracjecsys. The tampering with or falsification of time records will result in immediate dismissal from the Diagnostic Medical Sonography Program.

The student is required to clock in only for themselves. Any student that has clocked in for another student will receive written disciplinary action as described in the BCCC Disciplinary Policy on pages 22 and 23.

Didactic Attendance Per Semester:

# of Class Meetings per week	# of days off excused per semester	Attendance Outcomes
2 days/week	2 days	3 rd absence will result in a 10%- point deduction from the final grade*
3 days/week	3 days	4 th absence will result in a 10%- point deduction from the final grade*

^{*} Each additional absence will result in an additional 5%-point deduction from the final grade.

Didactic Lateness Per Semester:

# of Tardies	Lateness Outcomes	
2 tardies	2 nd tardy will result in 5%-point	

Associate of Applied Science, Diagnostic Medical Sonography Program

	deduction from the final grade
More than 2 tardies	Each additional tardy will result in an additional 5 percentage point
	deduction from the final grade

^{*} Arrival 15 minutes or later will result in an unexcused absence.

Clinical Attendance Per Semester:

# of Clinical Days a week	# of days off allowed per semester	Attendance Outcomes
2 clinical days (fall semester)	1 day off allowed	2 nd absence will result in a 10- percentage point deduction from the final grade*
3 clinical days (spring semester)	2 days off allowed	3 rd absence will result in a 10- percentage point deduction from the final grade*
4 clinical days (summer semester)	2 days off allowed	3 rd absence will result in a 10- percentage point deduction from the final grade*

^{*} Each additional absence will result in an additional 5 percentage point deduction from the final grade.

Clinical Lateness Per Semester:

# of Tardies	Lateness Outcomes
2 tardies	2 nd tardy will result in 5 percentage
	point deduction from the final
	grade
More than 2 tardies	Each additional tardy will result in
	an additional 5 percentage point
	deduction from the final grade

^{*} Arrival 15 minutes or later will result in an unexcused absence.

Make-up Time for Clinical Absences:

Absences that were incurred at clinical can be made-up but must be made up in the semester that the absence occurred, at the clinical site the student is assigned and during the semester break to ensure that the program does not exceed its capacity at the clinical site. Approval must be obtained from the clinical site and the BCCC clinical faculty.

Associate of Applied Science, Diagnostic Medical Sonography Program

I.B Holidays

The Diagnostic Medical Sonography Program is closed for all holidays that are observed by Bucks County Community College. Please go to the academic calendar on https://www.bucks.edu/calendarnews/academiccalendar/ for specific dates.

I.C Bereavement Policy

In the event of the death of a close relative, which would include parent, grandparent, brother, sister, wife, husband, or child, three days off will be granted upon notification to the Program Director's office. In any other event, it is not an excused absence.

I.D Leave of Absence Policy

Leave of absence requests will be reviewed on a case-by-case basis. The student must email the program director with their request and schedule a meeting to discuss their options. Meeting with the program director does not guarantee that the request will be approved. In the case that the leave of absence is approved, the student understands that they will only be permitted to rejoin the program if a seat is available.

DMS courses are only offered once a year, so if the leave of absence is approved, it will be for 1 year. The program director will determine the date that the student may rejoin the program. It is the student's responsibility to contact the program director with their intent to return on the agreed upon date. If the student does not contact the program director by this date, the student will receive a letter dismissing them from the program.

I.E Pregnancy Policy

A student may voluntarily disclose to the program director that they are pregnant. Students who voluntarily disclose a pregnancy will be held responsible for their academic progression. This includes didactic and laboratory coursework, as well as clinical rotations. If the pregnancy is complicated and requires the student to cease activities, the Leave of Absence policy may apply. Please see the academic progression and leave of absence policies for more details.

I.F Severe Weather Policy

At times inclement weather will force the closing of the College or delay its opening. The closure will include both class and clinical days. Announcements of closings and delays are made on www.bucks.edu or your local news stations. If a student signs up for Campus Text Alerts, a text will also be sent notifying of any campus closures. If the campus is closed on a class day, the class will be held via Zoom and communicated by the class instructor. Students must have a computer or phone capable of running the Zoom application. If the campus is closed on a clinical day, students are not to report to their designated clinical site. If there is a delayed opening, the school and clinical students will report to their designated area at the time classes resume. Any clinical hours missed due to weather must be made up by the end of the semester.

II. Academic and Clinical Requirements

II.A Technical Standards Policy

In keeping with the goals of the Diagnostic Medical Sonography Program, the highest priority is placed upon developing graduates who are competent, caring sonographers that possess the skills of the lifelong learning needed to incorporate new knowledge and methods into their practices and to adapt to a changing medical environment. The faculty has determined that certain technical standards are prerequisites for admissions, progression, and graduation from the Diagnostic Medical Sonography Program.

Associate of Applied Science, Diagnostic Medical Sonography Program

An individual must be able to independently, with or without reasonable accommodation, meet the following technical standards of general abilities and specifically those of observation; communication; motor, intellectual, conceptual, integrative, and quantitative abilities; as well as essential behavioral and social attributes. Individuals unable to resolve deficiencies in these technical standards, with or without reasonable accommodation, are counseled to pursue alternate careers.

In addition to academic standards, the following technical standards, published by the SDMS, are required for admission to the Diagnostic Medical Sonography Program:

- Effectively communicate with patients and other healthcare professionals.
- Hear the patient and distinguish audible sounds related to the exam.
- Read the patient's medical chart and/or physician orders.
- Transport, move, lift or transfer patients from a wheelchair or stretcher to an ultrasound bed or patient bed.
- Routinely push, pull, bend, and stoop.
- Have full use of both hands, wrists, and shoulders.
- Physically assist patients into proper positions for sonography examinations according to established procedures.
- Organize and accurately perform the individual steps in a sonographic procedure in the proper sequence.
- Handling stressful situations related to technical, procedural, or patient care situations
- Provide physical and emotional support to patients during procedures.
- Physically be able to administer emergency care including performing CPR.
- Visually reviewing and evaluating sonographic images; ability to see color distinctions.
- Apply problem-solving skills to optimize patient care and produce the best diagnostic information possible.
- Adapt to changing environments and be able to prioritize tasks.

II.B Student Advisement

Upon entrance into the Diagnostic Medical Sonography major, the student is designated an academic advisor. Each student is expected to actively participate in the advising process. The academic advisor will serve as a guide and support throughout the student's tenure in the program. Sonography courses are only offered in certain semesters and careful planning is critical to timely completion of degree requirements. The availability of academic advisement does not reduce the student's responsibility for academic decisions. Final responsibility for attaining degree requirements rests solely with the student.

Should any difficulties arise that may impact the student's education, the student is expected to make an appointment with the advisor promptly. Communication is an important aspect of professional development. Although the student is expected to handle situations to the best of the student's ability, there may be times when it is better to make the advisor aware that a difficult situation is beginning. Talking with an advisor maintains a channel of communication if changes in the student's status may be made.

The role of the Academic Advisor is to assist the student with:

- 1. Program planning
- 2. Strategies or approaches to successful goal achievements

Associate of Applied Science, Diagnostic Medical Sonography Program

- 3. Comprehension of the complete requirements of the program
- 4. Maintenance of satisfactory academic progress and professional development
- 5. Referrals, as needed, to counseling services for educational, personal, or emotional difficulties

In addition, the advisor is informed about the student's academic progress. The student and advisor should review the potential need for additional intervention in the student's substandard performance.

Other resources available to each student include:

- 1. The Director of Student Life Services (215-762-8518)
- 2. The Student Counseling Center (215-762-7625)
- 3. The Center for Student Academic Resources (215-762-7682)

II.C Academic Grading System and Academic Progression Policy

The Diagnostic Medical Sonography program follows the grading scale at Bucks County Community College. Diagnostic Medical Sonography didactic and clinical course work requires a *C* average or better to be enrolled in the Diagnostic Medical Sonography program.

Grade	Numerical	Quality Points
A Excellent	90-100	4
B+	87-89	3.5
B Good	80-86	3
C+	77-79	2.5
C Average	70-76	2
D+	67-69	1.5
D Lowest Passing Grade	60-66	1
F Failure		
W Withdrawn		
I Incomplete (A grade of		
F is automatically recorded		
if course work is not		
completed within thirty		
calendar days after the start		
of the following academic		
year semester.)		
AU Audit		

Sonography

To progress from semester 1 to semester 2 of the Diagnostic Medical Sonography program, students must earn the following grades:

 Course number
 Title
 Minimum passing grade

 DXMS 100
 Introduction to Sonography/Patient Care
 C

 DXMS 101
 Cross Sectional Anatomy in C

To progress from semester 2 to semester 3 of the Diagnostic Medical Sonography program, students must earn the following grades:

Course number	Title	Minimum passing grade
DXMS 200	Physics and Instrumentation in Sonography I	С
DXMS 201	Sonography of the	C
	Abdomen with Lab	
DXMS 201	Sonography of Superficial Parts/Vascular Structures with Lab	С
DXMS 210	Clinical Experience in Sonography I	С

To progress from semester 3 to semester 4 of the Diagnostic Medical Sonography program, students must earn the following grades:

Course number	Title	Minimum passing grade
DXMS 212	Physics and Instrumentation in	C
	Sonography II	
DXMS 211	Sonography of OB/GYN with	C
	Lab	
DXMS 215	Clinical Experience in	С
	Sonography II	

To graduate from the program, students must earn the following grades:

Course number	Title	Minimum passing grade
DXMS 220	Clinical Experience in Sonography III	С

II.D Dismissal and Re-Admittance Policy

Students who do not meet the minimum acceptable grade as defined above will be dismissed from the program.

Students who wish for a second attempt at the course for which they were unsuccessful must indicate a desire to return to the program by sending an email to the Director of the Diagnostic Medical Sonography Program by July 1st.

Entrance to the Diagnostic Medical Sonography program is competitive and students will only be readmitted if an open seat is available.

Students have only two opportunities to be successful in a course. Readmission after two unsuccessful

Associate of Applied Science, Diagnostic Medical Sonography Program

attempts will not be granted. Students may only reattempt two courses within the program. A third failure will result in dismissal from the program without the chance to re-enter it.

II.E Eligibility for Clinical Placement

Eligibility for clinical placement requires that the student meet the following criteria:

Before beginning clinical education experiences, and subsequently thereafter, students are required to:

- 1. Meet the ethics eligibility requirements of the Society of Diagnostic Medical Sonography and standards required by clinical agencies to which students are assigned.
- 2. Maintain current cardiopulmonary resuscitation (CPR) certification for health care professionals. Students who complete a course not for healthcare professionals and/or a fully online course must become certified as healthcare professionals. Students who do not meet this requirement are prohibited from access to clinical assignments until recertification is obtained.
- 3. Submit pre-entrance health examination and immunization records.
 - Documentation of two MMR immunizations or titers
 - Documentation of having had chickenpox, varicella vaccine, or titer for chickenpox
 - Documentation of hepatitis immunizations or signed waiver
 - Annual flu vaccination is required by all clinical sites. Students must provide documentation by November 1st to the Clinical Coordinator.
 - Documentation that they have received either (1) one dose of a one-dose COVID-19 vaccine no later than fourteen (14) days before the commencement of the Clinical Rotation, or (2) two doses of a two-dose COVID-19 vaccine, with the second dose having been received no later than fourteen (14) days before the commencement of the Clinical Rotation.
- 4. Submit results of a two-step PPD or QuantiFeron gold test. Students with a positive PPD will need a chest x-ray and physician clearance before clinical experience.
- 5. PA state criminal background check
- 6. FBI Fingerprinting Clearance
- 7. Child Abuse Clearance
- 8. Drug Screening completed by Concorde Inc within three months before the program's start date and clinical placement.
- 9. Document current and continuous personal healthcare insurance throughout program enrollment.

II.F The Clinical Competency Evaluation System

The clinical evaluation system is designed to test the students' performance at various levels of competency. For successful completion in the Diagnostic Medical Sonography program, the student must:

- 1. Pass written tests on didactic information.
- 2. Practice scanning in the sonography laboratory with program instructors and in the clinical setting with an ARDMS registered sonographer.
- 3. Complete all clinical competencies and laboratory proficiencies as outlined in this handbook.

II.G Clinical Competency and Laboratory Proficiency Requirements

Each semester, the students' clinical assignments correlate with classroom instruction. The clinical instructor may make changes for the enhancement of the student's clinical education experience.

Student sonographers must complete and pass 21 competency examinations. The competencies are listed below as either Mandatory or Optional. Twenty mandatory CAAHEP competencies must be completed to fulfill program requirements and then students can select 1 study from the optional list. Students must achieve an 85% or better to pass a competency exam.

Per CAAHEP guidelines, clinical competency requirements must be completed in clinical and may not be simulated in a laboratory setting. If a student is attempting a competency, the grade and evaluation must be completed by a sonographer registered in the corresponding concentration area. For example, if a student is attempting a competency for an abdominal exam, the sonographer evaluating and grading that competency must be RDMS in Abdomen. When a student believes they can meet the competency expectations, they may attempt that competency at clinical.

Students will also have proficiency exams in the laboratory setting. The student must achieve an 85% on the laboratory proficiency exam to pass.

II.H Supervision of Students- Direct and Indirect Supervision

Sonography students will not be scheduled for clinical rotations in the Ultrasound Department without a registered sonographer's supervision. This means that the registered sonographer will be immediately available and in the surrounding area. Student sonographers will scan with both direct and indirect supervision. Student sonographers will initially scan under direct supervision as they are developing their skills. As their knowledge of anatomy, instrumentation and ultrasound improves, they will progress to more indirect supervision during exams. The amount of scan time for each patient will be at the discretion of the registered sonographer and clinical site.

All requisitions must be reviewed by a registered sonographer to determine the student's capability of handling the examination and the individual patient. All sonograms must be viewed and passed as acceptable by a registered sonographer before the exam is ended.

<u>Direct Supervision</u> occurs when a student is directly observed by a supervising sonographer while performing a sonographic exam. The supervising clinical instructor will assist the student sonographer as they are developing their scanning skills early in the program and clinical experience.

Indirect Supervision occurs when the student performing a sonographic exam has a supervising sonographer within "normal voice call" distance away from the ultrasound room where the exam is being performed. Student sonographers will scan independently and call upon the supervising sonographer if assistance is needed or when the exam is finished.

Mandatory

Abdomen		<u>Semester</u>
Aorta/IVC	M	Fall/Spring
Abdominal Doppler (one of the following):	M	Fall/Spring
SMA, Hepatic Artery, IVC, Renal Artery,		
Aorta, Portal Vein, Hepatic Veins		
Biliary System	M	Fall/Spring
Liver	M	Fall/Spring
Pancreas	M	Fall/Spring
Renal/Bladder	M	Fall/Spring
Spleen	M	Fall/Spring
Abdomen Complete	M	Fall/Spring
Sonographic Guided Procedure (assistance)	M	Fall/Spring/Summer

OB/GYN		
Non-Gravid Uterus	M	Fall/Spring
Endovaginal	M	Fall/Spring
1 st Trimester OB	M	Spring/Summer
2 nd /3 rd Trimester OB: Thorax and Heart	M	Spring/Summer
2 nd /3 rd Trimester OB: Head, Neck, and Brain	M	Spring/Summer
2 nd /3 rd Trimester OB: Skeleton & Abd/Pelvis	M	Spring/Summer
2 nd /3 rd Trimester OB:	M	Spring/Summer
Survey/Biometry/Growth		
Biophysical Profile	M	Spring/Summer

Small Parts/Chest		
Thyroid	M	Fall/Spring
Scrotum	M	Fall/Spring
Non-Cardiac Chest	M	Fall/Spring

Optional

		<u>Semester</u>
Breast	О	Fall/Spring/Summer
Superficial Mass	О	Fall/Spring/Summer
Venous Doppler Extremity	0	Fall/Spring/Summer

Lab Proficiency - Mandatory

		<u>Semester</u>
IV insertion/injection	M	Fall
GI Tract assessment/appendix	M	Fall

II.J Clinical Experience Grade

Clinical Site and Educational Objectives are monitored for progress and achievement with several methods.

- 1. Clinical Competency System
 - a. Students will be required to meet all competency goals in the clinical environment. Competencies cannot be met in the laboratory setting. Students will work with their supervising sonographer at clinical to determine student readiness to earn their competency. A grade of 85% or better is considered passing.
- 2. Monthly Clinical Evaluations Monthly Clinical Evaluation forms will be filled out by clinical staff who are Registered Sonographers to rate the student's performance.
- 3. End of Semester Clinical Evaluations are given at the end of each semester. The End of Semester Clinical Evaluations will be filled out by clinical staff and mimic the Monthly Clinical Evaluations but are used to summarize an entire semester.
- 4. Daily Log Sheet Requirement Each student is required to log all procedures they observed, assisted, or performed. Completing the log each week is **mandatory**. The log must be submitted via Trajecsys at the end of each week. If the daily log is not entered by the due date, the student will lose 10% off their daily grade.
- 5. Faculty Clinical Skills Assessment Each student will be evaluated by designated BCCC Faculty during each clinical semester.

II.K Clinical Rotation Policy

All students must rotate through various clinical sites to obtain the required clinical education. The program's officials will provide a schedule for all rotations. BCCC faculty will do their best to place you within a reasonable driving distance from your home but be aware that you may need to travel up to one hour to your assigned site. All students must have reliable transportation.

Rotations hours are:

8:00 A.M. – 4:00 P.M. Monday-Friday (days of the week vary by semester)

During their training, students will be required to rotate among various imaging facilities or hospitals to further their knowledge and education in sonography.

II.L Requirements for Graduation

The graduate of the associate in applied science in Diagnostic Medical Sonography is educated to function as a diagnostic medical sonographer in a variety of settings, such as hospitals, imaging centers, and private offices. The graduate integrates the components of sonographic science to function as a member of the health care delivery team within the scope of sonography practice.

To be eligible for graduation, the student must:

- 1. Meet all didactic educational requirements to complete an associate degree in Sonography.
- 2. Meet all clinical education requirements set by the Diagnostic Medical Sonography Program as well as the American Registry for Diagnostic Medical Sonography and CAAHEP.
- 3. Meet all the financial obligations.
- 4. Return or replace any school, library, resource materials, or ID badges.

III. Professional Behavior and Conduct

III. A Conduct and Disciplinary Policy

All students will always behave ethically and professionally while on duty and on hospital premises.

The school follows the three-strikes rule when dealing with disciplinary misconduct. The disciplinary misconduct does not have to be the same offense to go through the progressive sequence. The Diagnostic

Medical Sonography Program will not tolerate misconduct over the three strikes given to each student.

- 1. On the first offense, the student will receive a **verbal warning.** The student will initial the written documentation of the verbal warning. The faculty member will sign it and it will be placed in the student's permanent file.
- 2. On the second offense, the student will receive a **written warning**. A written warning will be issued from a faculty member to a student for the second offense. This warning will also be signed by both the faculty member and the student. The student's signature does not necessarily indicate that the student agrees with the warning but does indicate that the student has been made aware of the warning. This document also gets placed in the student's permanent file and recorded in Maxient.
- 3. On the third offense, the student will be **dismissed** from the program.

 *If the student does not agree with the disciplinary action, they must follow the Due Process Grievance Procedure indicated in Section E.

III.B SDMS Code of Ethics Policies

All students must abide by the Society of Diagnostic Medical Sonographer (SDMS) Ethic Requirements. Violations of the code of conduct, even with successful academic progression and graduation can prevent a student from becoming certified.

To review the SDMS Code of Ethics, visit SDMS Code of Ethics

III.C Disciplinary Misconduct

Rules and regulations must be established that serve as guidelines for appropriate behavior and aid us in providing the best care for the patient. Disciplinary policies are progressive except for students' actions that are flagrant or severe violations of rules or regulations. Any of the following actions or behaviors would be regarded as just cause for disciplinary action (these are examples but not limited to the below list):

- 1. Abuse or assault of visitors, patients, students, or hospital personnel.
- 2. Use or possession of alcoholic beverages on hospital or college premises.
- 3. Refusal to accept a reasonable clinical assignment.
- 4. Willful misuse of hospital equipment or property.
- 5. Insubordination.
- 6. Violation of safety rules.
- 7. Excessive absence and/or tardiness.
- 8. Failure to report absence promptly.
- 9. Clocking in or out for other students on Trajecsys,
- 10. Possession or use of illegal drugs.
- 11. Falsification of any hospital or school records
- 12. Leaving the clinical area without permission.
- 13. Sleeping on clinical assignment.
- 14. Disclosing confidential information without authorization
- 15. Leaving patients unattended during sonographic procedures.
- 16. Failure to report to clinical assignment in proper professional attire as stated by the dress code.
- 17. Stealing from patients, students, or hospital personnel.
- 18. Smoking in areas where it is prohibited.
- 19. Chewing gum or tobacco while on clinical assignment.
- 20. Violation of Supervision of Student Policy Direct and Indirect Supervision Policy

III.D HIPAA Policy

The HIPAA Privacy regulations require health care providers and organizations, as well as their business associates, to develop and follow procedures that ensure the confidentiality and security of protected health information (PHI) when it is transferred, received, handled, or shared. This applies to all forms of PHI, including paper, oral, electronic, etc. Furthermore, only the minimum health information necessary to conduct business is to be used or shared.

All students must abide by HIPAA regulations and procedures established in the healthcare setting. Any HIPAA violation by a student will result in dismissal from the program.

III.E Substance Abuse Policy

BCCC has established policies, rules, and regulations that proscribe the standards of conduct expected of students and members of the College community. This standard of conduct includes the prohibition of the use of possession or dissemination of narcotics or other mind-altering drugs, other than those medically prescribed, properly used, and in the original container, by the student on the College property or the clinical setting

Any student discovered to be violating these rules is subject to immediate suspension or dismissal. Such action will be taken independently of any criminal action that may arise from a violation of civil law governing these areas.

III.F Grievance Procedure for Students

The following is an outline of the steps to be followed:

- 1. Students should discuss their concerns/issues with a faculty member within 3 business days of the occurrence.
- 2. The faculty member has 3 business days to respond to the student.
- 3. If the issue is not resolved, due to the faculty member not responding to the student orthe student is dissatisfied with the response, the student should consult with the Program Director of the Diagnostic Medical Sonography Program within 3 business days of the failed resolution.
- 4. The Program Director has 3 business days to respond to the students' concerns.
- 5. If the issue is not resolved, due to the Program Director not responding to the student or the student is dissatisfied with the response, the student should consult with the Dean of Health Sciences within 3 business days of the failed resolution.
- 6. The Dean of Health Sciences has 3 business days to respond to the students' concerns.
- 7. If the issue is not resolved, due to the Dean of Health Sciences not responding to the student or the student is dissatisfied with the response, the student should consult with the Associate Provost Office/Academic and Student Services Department within 3 business days of the failed resolution.
- 8. If a student thinks he/she is not receiving a fair hearing or feels the need for an ombudsman, the student should contact the Provost/Academic Affairs Department.

III.G Responsibility of Students to Supervising Sonographer

- 1. Students are directly responsible to the supervising Sonographer(s) in charge of the area of clinical assignment and are subject to the authority of such supervising personnel. The assigned supervisor must be notified of any changes to your schedule, even if you do not see them regularly.
- 2. The supervising Sonographer(s) are responsible for making decisions regarding patient care.
- 3. The student is responsible for carrying out any order given by the supervising Sonographer or staff physician.

- 4. The student is responsible for informing the supervising Sonographer of his or her whereabouts when the student must leave the clinical assignment area.
- 5. Students must report back to the clinical assignment area promptly after lunch.

III.H Care of Personal Items

Lockers may be provided for student use. All personal items such as pocketbooks, coats, sweaters, food, or drink may not be brought into the ultrasound room or working areas. Books and other personal items should be placed in lockers or taken home at the end of the day. Clinical sites are not responsible for items stolen while not under lock and key.

III. I Dress Code

Students are required to present a professional appearance during all scheduled clinical assignments. Students are required to practice appropriate personal hygiene when participating in clinical education assignments.

The dress code for students attending clinical assignments include:

- 1. Cleanliness and neatness without offensive odor are required. This includes perfume/cologne.
- 2. Solid navy blue scrub paints correctly sized and fitting at the waist. Navy blue scrub top, clean, neat, pressed, and unstained. All-white socks. Uniforms must be purchased through a uniform vendor set by the Diagnostic Medical Sonography Program.
- 3. A navy blue scrub top is embroidered with the college logo on the left chest area to identify them as a student of the college.
- 4. A solid white turtleneck or crew neck long sleeve shirt under a scrub top is acceptable.
- 5. Clean white uniform shoes, or white sneakers. Sneakers with mesh material are not permitted.
- 6. Lab jackets/coats are recommended if the clinical assignment area necessitates additional clothing for warmth.
- 7. Simple post-earrings, flat ring/bands, and a watch are acceptable. Any exposed body jewelry (including tongue), other than that worn in the ear or on the finger is prohibited.
- 8. Identification badges issued by the Diagnostic Medical Sonography Program must be visibly displayed.
- 9. Hair must be neat in appearance, worn up and secured off the face, and of natural color. A single solid white, navy, tan, or black headband may be worn.
- 10. Beards should be neat, clean, and well-groomed, not of extreme length, and should not interfere with the performance of clinical education assignments.
- 11. All tattoos must be fully covered at all times.
- 12. Fingernails must be short and neatly trimmed. Artificial nails and nail tips are not permitted.

Any student not in uniform as described above will have the violation documented and may be sent home and considered absent for that day. Dress code violations are cumulative throughout the clinical education courses. Violation will follow the disciplinary misconduct policy

IV. Miscellaneous Policies

IV.A Telephone Use Policy/Electronic Device Policy

Hospital telephones are not to be used for receiving or making personal phone calls. If it is an emergency, students may use phones in the department. Do not abuse the use of hospital telephone calls. All types of cellular and electronic devices are prohibited in all clinical areas and the classroom. Violation of this policy will result in disciplinary action.

IV.B Meal-Time Break Policy

Clinical Education – The student will receive a one-hour break for lunch, halfway through their workday. Students are required to take this break. The student is to return promptly to their clinical site when their lunch is over. Violation of lateness to return to clinical will result in disciplinary action.

Didactic – An hour lunch break will be given to didactic students during class days. The student is required to return to class promptly after the lunch break is over. Late violations or the student not returning to class after lunch will result in disciplinary action.

IV.C Policy for Equipment Breakage and Student Injuries

If a student is involved in an injury while on clinical assignment, the Sonographer in charge must be notified immediately. If a student is injured, they must be sent to the emergency room for treatment if deemed necessary. All medical charges incurred will be the responsibility of the student. Any equipment broken or not working correctly should be reported immediately to the supervisory personnel in the Sonography Department.

IV.D Communicable Disease Policy

Any student who suspects he or she may have been exposed to or contracted a communicable must notify the program director. In the event a student has been exposed, appropriate action will be taken to ensure the health and well-being of hospital patients, staff, and fellow students. In the event a student is barred from the clinical education site due to a communicable disease, the Program will work with the student to make up for missed clinical education with a minimum of lost time to the student.

- Students entering the Diagnostic Medical Sonography Program must know that they, like all health care workers, will be exposed to various contagious diseases during their training and career. Precautions to be taken are outlined in the course DXMS100. Additional information is provided by each clinical facility. You are required to make use of any protective devices available
- 2. If you should be the carrier of a contagious disease, you must notify the Program Director immediately. A temporary suspension of training may be necessary for legal reasons and the protection of your patients.
- 3. Students will practice strict isolation techniques if the patient has been diagnosed as having a contagious disease.
- 4. Students may not refuse to perform sonographic services for patients with communicable diseases.

IV.E Policy on Seasonal Influenza Vaccination for Students

The Diagnostic Medical Sonography Program requires that all students, during the influenza season, must have had the seasonal influenza vaccination and provide verifying documentation to the Clinical Coordinator. This information will be sent to the healthcare facility in which they enter. If the vaccination

is not documented, the student will not be permitted to participate in the clinical experience. This could affect the student's degree course plan, program requirements, and time to degree completion. The cost to receive the influenza vaccination is the student's responsibility.

IV.F Infection Control Policy

Because many people who carry highly infectious pathogens (e.g., AIDS virus, hepatitis A & B, TB, etc.) are not aware of it, all students and faculty will strictly adhere to this policy. These safety guidelines are designed to protect the students, faculty, and patients from the spread of infectious diseases. Violation of this policy will result in disciplinary action.

- 1. Wear gloves when working with patients where blood/body fluids are evident or likely; i.e., invasive sonographic procedures like biopsies or thoracentesis.
- 2. Wear gloves when wiping blood/body fluids from equipment. Use appropriate cleaning chemicals.
- 3. Wash hands after handling any blood and body fluids.
- 4. Wash hands before and after patient care activities.
- 5. Dispose of linens soiled with blood and body fluids in appropriate containers.
- 6. All infectious needles, tubing, etc., need to be placed in puncture-proof containers. Do not clip needles or recap needles.
- 7. All injuries and splashes must be reported to the faculty immediately. If faculty is not available, report the incident to the department floor supervisor.
- 8. Any splash of body fluid entering a mucous membrane (eye, nasal passage, mouth), open cut, or wound shall be reported immediately to the faculty. If the occurrence is at a clinical site, the student will be sent to the health service or appropriate treatment facility for evaluation and treatment. The respective clinical site incident report will be filled out and notify the Program Director of the Diagnostic Medical Sonography Program. The student will be responsible for the cost of any treatment.

IV.G Withdrawal from Program Policy

Students wishing to withdraw from the diagnostic medical sonography program must submit this request in writing. All property of the program must be returned. Failure to return items will result in withholding of monies or grade transcripts due to the student.

IV.H Tuition and Fees

The Diagnostic Medical Sonography Program follows the tuition cost per credit designated by Bucks County Community College. Additional fees are added in certain DXMS courses and are below. Also, additional costs for a student in the Diagnostic Medical Sonography Program are included below.

Tuition/Fees	Residents of Bucks County	Out-of-County Residents	Out-of-State Residents	Non-Sponsored**
Tuition per semester credit hour	\$165.00	\$330.00	\$495.00	\$195.00
Activity Fee per semester credit hour	\$4.00	\$4.00	\$4.00	\$4.00

Capital Fee per semester credit hour	\$0.00	\$10.00	\$20.00	\$10.00
College Services Fee	\$50.00	\$50.00	\$50.00	\$50.00
Technology Support Fee per semester credit hour	\$35.00	\$35.00	\$35.00	\$35.00
Returned Check Fee	\$25.00	\$25.00	\$25.00	\$25.00

^{**}Non Sponsored Counties: Bedford, Bradford, Cameron, Centre, Clarion, Clearfield, Clinton, Crawford, Elk, Erie, Forest, Franklin, Fulton, Greene, Juniata, Lycoming, McKean, Mifflin, Montour, Perry, Pike, Potter, Snyder, Tioga, Union, Venango, Warren, Wyoming

Additional program costs to the student, in addition to tuition/fees*

Uniforms (Flynn & O'Hara)	\$35.00 a set
Textbooks	\$800- estimate
Physical, PPD, drug screen, yearly Flu vaccine, required immunizations	Varies depending on medical insurance, \$45 for drug screen through Concorde
CPR course	\$85.00
Child Abuse Clearance	\$13.00
PA Criminal Background Check	\$10.00
FBI Fingerprint Criminal Background Check Through IdentoGO	\$21.35
Transportation to Clinical Affiliation setting	Varies

^{*}All fees are estimated and are subject to change without notice

IV.I Tuition Refund Policy

The Diagnostic Medical Sonography Program does follow Bucks County Community College Tuition Refund Policy.

Tuition and fees paid for classes canceled by the College due to insufficient registrations are 30

fully refundable. Other tuition refunds will be processed under the following official policy of the College:

- Official Withdrawal or Drop of courses is effective upon receipt of written notice from the student in the Office of Admissions, Records, and Registration.
- Official Drop from courses **before** the end of the add/drop period as published on <u>Student Planning</u>:
 - 100% refund of Tuition, Capital Fee, Activities Fee, and Technology Support Fee.(Note: The College Service Fee is non-refundable).
- Official Drop from courses **following** the add/drop period as published on <u>Student</u> Planning:
 - Refunds are based on the actual withdrawal date.
 - Refunds Tiers are based on the percent completion of a term and will vary.
 - Refunds will be processed according to the following semester's RefundSchedule(s)

IV.J Transfer Policy

The program does accept not accept transfer students.

If any current student of the BCCC Diagnostic Medical Sonography Program wishes to transfer to another diagnostic medical sonography program, the faculty will furnish the prospective institution with the needed transcripts, course syllabi, and descriptions with the written approval of the student.

IV.K College Services

Parking

Students are permitted to park in the student lots on campus after obtaining a parking permit from the Security Department Website: https://www.bucks.edu/resources/security/parking-permits/

Library

Students are encouraged to use the library for research purposes. Hours vary by semester and can be found on the college website, catalog, and as posted on the library door. They may use their Bucks County Library cards or obtain a card by giving student ID numbers to the librarian.

Counseling Services

The college offers a comprehensive counseling service to meet the individual needs of its students. See BCCC college catalog or visit the counseling services website: https://www.bucks.edu/resources/counseling/

Tutoring Center

To help the learning process, the College provides a Tutoring Center where students can obtain assistance. Visit the Tutoring Center website: https://www.bucks.edu/academics/asc/online/ Tutoring for Sonography courses can be provided by Sonography Faculty. Please submit a request to be tutored to the course faculty or the Program Director.

Accessibility Services

Students with disabilities may request reasonable accommodations through this office. See BCCC college catalog or visit:

https://www.bucks.edu/resources/campusresources/accessibility/

Child Care

The Early Learning Center is the child development center serving students, faculty, and staff of the College. It offers quality licensed care with certified teachers. Visit their website for more information: https://www.bucks.edu/resources/campusresources/elc/

IV.L COVID-19 POLICIES

• If a student tests positive for Covid-19, they must follow CDC guidelines for isolation and notify their clinical coordinator and program director for guidance.

Associate of Applied Science, Diagnostic Medical Sonography Program

Clinical Sites

Name	City	State	Zip
Abington Lansdale	Lansdale	PA	19446
Abington Memorial (Warminster Outpatient)	Warminster	PA	18974

Bucks County Community College			
Jefferson Health- Frankford	Philadelphia	PA	19124
Jefferson Health-	Philadelphia	PA	19114
Torresdale			
Jefferson Health – Bucks	Langhorne	PA	19047
Doylestown Hospital	Doylestown	PA	18901
Grandview Hospital	Sellersville	PA	18960
Lower Bucks Hospital	Bristol	PA	19007
Hospital of University of Pennsylvania	Philadelphia	PA	19104
Nazareth Hospital	Philadelphia	PA	19152
St. Christopher's Hospital for Children	Philadelphia	PA	19134
Capital Health – Maternal Fetal Medicine	Pennington	NJ	08534
Main Line Health – Paoli	Paoli	PA	19301
Main Line Health – Broomall	Broomall	PA	19008
Main Line Health – Bryn Mawr	Bryn Mawr	PA	19010
Main Line Health – Lankenau	Wynnewood	PA	19096