



Figure 1: Owens Logo.

Course Syllabus
Semester: Fall
School of Nursing and Health Professions
Department of Sonography

<i>Course Name:</i>	Breast Sonography
<i>Course & Section Number:</i>	DMS 110
<i>Meeting Day(s) & Time(s):</i>	
<i>Credits:</i>	1.0
<i>Contact Hours:</i>	1.0
<i>Instructor's Name:</i>	
<i>Office Hours & Location:</i>	
<i>OCC Email:**</i>	
<i>Additional Contact Information:</i>	

****Please use only Owens email for course communications.**

Catalog description: The study and uses of diagnostic medical sonography and its application in the diagnosis of disease of the breast. This course will include an in-depth study of breast anatomy as well as the ultrasonic characteristics of normal tissue versus pathological processes. The sonographer's role during ultrasound-guided invasive procedures will be discussed as well as the incorporation of other imaging techniques for breast scanning

Prerequisite/Corequisites: DMS 212, DMS 204, DMS 214

Course Materials:

Dixon, Anne-Marie. Breast Ultrasound: How, Why and When. Churchill Livingstone/Elsevier, 2008.

If a print book, e-book, or access code is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called “Find Books” on the course schedule for each course section.

What You Will Learn in the Course

Course Objectives:

This course will:

1. Introduce the normal anatomy and physiology of the breast, as well as scanning protocols and exam technique.
2. Discuss both benign and malignant disease processes of the breast and their sonographic appearance.
3. Introduce the concept of correlating pertinent patient history and other imaging modalities with sonographic breast imaging.
4. Discuss interventional techniques associated with ultrasound-guided procedures of the breast.

Student Learning Outcomes:

Students will:

Outcome	Where Assessed
1. Describe and identify normal breast anatomy and physiology.	In-Class Activities, Collaborative Assignments, Quizzes, Midterm
2. Identify and describe both normal and abnormal breast anatomy and various pathologies found in the breast on sonographic images.	In-Class Activities, Collaborative Assignments, Midterm, Final Exam, Padlet Research Project
3. Utilize other imaging techniques to aid in sonographic scanning of the breast.	In-Class Activities, Collaborative Assignments, Padlet Research Project
4. Correlate pertinent patient history and review other imaging modalities to aid in providing diagnostic information.	In-Class Activities, Padlet Research Project

Technology, Lab, and File Requirements:

Microsoft Office 365

<https://www.owens.edu/office365/>

Respondus

<https://download.respondus.com/lockdown/download.php?id=139313370>

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 123) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will

be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu. The policy may be found on the Owens website: [3358:11-2-63 Accommodation for a Student Absence for the Observance of Religious Beliefs and Practices Policy](#)

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible. Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

Student Responsibilities & Instructor Expectations

Student Responsibilities:

- You are expected to attend weekly classes and arrive on time. If you are going to be absent, please email your instructor before class begins. Afterward, review the assignment calendar to see what was missed and reach out if you have questions.
- You are expected to fully engage with the course material and consistently put forth your best effort in lecture and lab.
- If you are unable to complete an assignment on time, contact your instructor as soon as possible to discuss your options.
- Email is the preferred method of communication outside of office hours. Please include clear and specific details in your message so your instructors can respond efficiently.
- You are encouraged to ask questions or request clarification. Unless we hear otherwise, we will assume you understand the material. Each class builds on previous concepts, so staying current is important.
- Show respect for your instructors, classmates, and the learning environment.
- You are expected to follow all guidelines and procedures outlined in the Sonography Department Procedure Manual.
- For technical issues related to Blackboard, contact the Owens Help Desk.

Instructor Expectations:

- The instructor will be respectful of your time and begin and end class on time. If any changes to class times occur, you will be notified by email.
- Your instructor's goal is to review and return assignments that require student corrections within three days of submission. Assignments that do not require corrections or resubmission may take longer to be fully graded. If it has been more than three days and you are waiting on feedback for an assignment you believe may need revision, please email your instructor.
- Your instructor checks their email several times a day, but also has responsibilities outside of teaching this course. They will do their best to respond to your email with 24 hours on weekdays and within 72 hours on the weekends.
- Office hours are available outside of class time to support you with any questions or concerns related to the course. Please don't hesitate to make use of this time.
- Your instructor welcomes and encourages questions.
- Teaching is a two-way process, and your instructor hopes to learn from your insights, questions, and feedback throughout the course.

How Grades are Determined and Major Assignments

Grading Procedure:

Grades will be calculated on the following scale.

93% and Above	A
85% to 92%	B
76% to 84%	C
60% to 75%	D
59% or Below	F

If the percentage earned is less than 76% for the course, the student will earn a grade of “**D or F**” for the course and will not be able to continue in the program.

The final grade for the course will be computed using the following weights.

In-Class Activities	15%
Collaborative Assignment	15%
Quizzes	10%
Midterm	20%
Padlet Research Project	20%
Final Exam	20%

Total: 100%

****Please note that ½ point will be deducted from all homework, tests, and assignments for each spelling error. Using abbreviations will also result in a ½ point deduction. ****

In-Class Activities

Attending class and being an active learner will elevate student success in the course. Each week, there will be an in-class activity to be completed as a class. Students must submit the assignment on Blackboard by midnight on the day of class in order to receive points for in-class activities. Any student who is unable to attend class for the week must notify the course instructor at least 30 minutes prior to the start of class in order to be eligible for a make-up assignment. If no notification is received, the student will forfeit the in-class participation points from the activity for the week. In-class activities are worth 15% of the total course grade.

Collaborative Assignments

Each week there will be a collaborative assignment that is to be completed during class in assigned groups. Assignments will review material discussed in the lecture and textbook material from the specified week. Students who are absent from class must submit the assignment on Blackboard by the specified due date to receive full credit; absent students must also complete this assignment on an individual basis. Collaborative assignments are worth 15% of the total course grade.

Quizzes

Five quizzes will be given in class through Blackboard. The quizzes will review information found the PowerPoint lecture and textbook readings for the designated week. No late quizzes will be accepted without prior approval from the instructor. Make-up quizzes will not be given. Quizzes are worth 10% of the course grade.

Midterm Exam

A midterm exam will be given worth 20% of the final grade and must be submitted on or before the specified due date via Blackboard. If a student will be absent on the day this assignment is due, the assignment should be submitted through Blackboard before the start of class to receive full credit. A five (5) point deduction will be given for each calendar day the assignment is late unless prior approval from the instructor was given.

Padlet Research Project

All students will choose a breast disease to research and put into a Padlet presentation. Students will also complete a peer review on three classmates' presentations. All topics must be approved by the instructor no later than week four. The Padlet research project should be submitted through Blackboard on or before the specified due date. A five (5) point deduction will be given for each calendar day the assignment is late unless prior approval from the instructor is given. For more details, please refer to the Padlet Research Project Guidelines, Padlet Peer Review Evaluation, and Padlet Presentation Rubric on Blackboard. The Padlet research project will be worth 20% of the overall course grade.

Final Exam

A final exam will be given and worth 20% of the final grade. Any student arriving late to class on the day of the final exam will not be permitted to enter the classroom and will have to take a make-up test. Any student who is unable to attend class to take the exam must notify the course instructor at least 30 minutes prior to the class period in order to receive full credit. If no notification is received prior to missing the test, a five (5) point reduction will be taken from the make-up test score. All makeup tests will be taken in the Testing Center within three (3) days of the original test due date.

Assignment Calendar

Week/ Date	Topic	Reading Assignments	Assignment	Student Learning Outcomes
One	Syllabus Introduction Equipment for Breast Imaging	Chapters 1, 3, & 4	Collaborative Assignment: Week 1 In-Class Activity Week 1: Case Studies Weekly Quiz 1	3,4
Two	Labor Day- HOLIDAY WHEN NEEDED			

Three	Normal Breast Anatomy & Ultrasound Appearance Exam Technique, Interpretation, and Recording	Chapters 5-7	Collaborative Assignment: Week 3 In-Class Activity Week 3: Tyrer-Cuzick Scoring Weekly Quiz 2	1,2,4
Four	Benign Breast Disease	Chapter 8	Collaborative Assignment: Week 4 In-Class Activity Week 4: Moose & Doc, Benign Conditions Weekly Quiz 3 Padlet research topic due for approval	2,3,4
Five	Malignant Breast Disease Breast Cancer Staging & Treatment	Chapters 2 & 9	Collaborative Assignment: Week 5 In-Class Activity Week 5: Moose & Doc, Malignant Conditions Weekly Quiz 4	2,3,4
Six	Ultrasound of the Augmented Breast and Male Breast Disease	Chapters 10 & 11	Collaborative Assignment: Week 6 In-Class Activity Week 6: Breast Bingo Weekly Quiz 5 Midterm Due Padlet Research Project Due	1,2,3
Seven	Ultrasound Guided Interventional Techniques	Chapters 12 & 13	Collaborative Assignment: Week 7	3,4

	Additional Imaging Techniques for Breast		In-Class Activity Week 7: Mammogram Mass Location In-Class Final Exam Review Padlet Peer Review Due	
Eight	<u>In Class</u> Final Exam			1,2,3,4

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.