



INSTITUTE FOR
INTERNATIONAL
MEDICINE

INMED Professional Certificate Course in Ultrasound for Primary Care Syllabus

Course Faculty:

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Learning Support:

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Overview:

Quality medical care in low-resource settings is often hampered by lack of objective clinical information. ultrasonography is a useful technology in such settings, providing vital data to support patient care decision-making. This course enhances performance and interpretation for ultrasonography of carotid, thyroid, heart, lung, aorta, abdomen, urinary tract, DVT screening, joint and venous access, and eFAST exam. The INMED Professional Certificate Course in Ultrasound for Primary Care is a hybrid experience that combines online preparation followed by a one-day, in-classroom event to master hands-on skills and assess achievements.

Competency Objectives:

At the completion of the INMED Professional Certificate Course in Ultrasound for Primary Care learners will be able to:

- Apply the basic principles of ultrasonography to clinical settings
- Perform basic ultrasonography of carotid, thyroid, heart, lung, aorta, abdomen, urinary tract, DVT screening, and joint and venous access
- Interpret basic ultrasonography of carotid, thyroid, heart, lung, aorta, abdomen, urinary tract, DVT screening, and joint and venous access
- Perform eFAST (Extended Focused Assessment with Sonography for Trauma) Exams
- Interpret eFAST (Extended Focused Assessment with Sonography for Trauma) Exams

Timeframes:

This Professional Certificate Course is a hybrid experience that combines an online learning experience followed by a one-day, in-classroom event to master hands-on skills and assess achievements.

Academic Credit:

Completion of this course requirements earns one credit hour of academic credit.

Admission Requirements:

- Currently enrolled in Medical; Physician Assistant; APRN program (or)
- Active MD/DO; PA; or APRN clinical license that is in good standing

Computing Requirements:

The following are the minimum computing requirements for participating this course. Students must have ready access to and be functionally proficient with:

- A personal computer with an up-to-date operating system and ample memory for downloads. A rectangular monitor (desktop or tablet) is preferable for course navigation.
- A web browser, preferably the most up-to-date version of Chrome, Internet Explorer, Firefox, or Safari
- Applications capable of opening and editing Microsoft Word documents and of viewing PDFs
- An Internet connection, preferably high speed
- Capability of viewing YouTube and Vimeo videos

Education Methods:

Learners will achieve the course competency objectives through the following education methods:

- Interactive online learning techniques
- Interactive live presentations
- Skill stations for increasing technical proficiency
- Case studies for developing clinical judgment

Assigned Ultrasound for Primary Care Lessons:

Assignments to be completed prior to the in-person classroom event:
Participate in the Ultrasound for Primary Care content, Lessons 1-15, and complete the Pre-Test and Post-Test for this content

Learning Content:

- Lesson 1 Ultrasound Physics
- Lesson 2 Thyroid
- Lesson 3 Carotid
- Lesson 4 Pulmonary
- Lesson 5 Cardiac
- Lesson 6 Hepatobiliary
- Lesson 7 Spleen
- Lesson 8 Renal
- Lesson 9 Inferior Vena Cava
- Lesson 10 Abdominal Aorta
- Lesson 11 Bladder
- Lesson 12 Musculoskeletal
- Lesson 13 Vascular Access
- Lesson 14 eFAST
- Lesson 15 Deep Venous Thrombosis

In-Person Classroom Event:

Each major topic will begin with a rapid review of anatomy and examples of normal scan planes, followed by supervised, hands-on scanning experience to achieve normal scan planes, ultrasound techniques and equipment control.

8:00am	Principles of US equipment use and image optimization
9:00	Thyroid & Carotid
10:00	Limited Echo & Thoracic
11:00	Abdominal, Renal, Urinary & eFAST
12:00	Lunch
1:00pm	DVT Screening
2:00	Joint Space Access (Glenohumeral, Superiolateral Knee)
3:00	Venous Access (IJV, SCV, Basilic, Common Femoral)
5:00	Finish

*In-Person Classroom Event schedule is subject to change

Grading:

This course is graded pass/fail. Successful pass requires:

- Ultrasound for Primary Care Post-Test $\geq 80\%$

- Satisfactory or higher demonstration of all required skills
- Complete course evaluation at the course conclusion.

Final Exam:

Learners will each demonstrate their skills throughout the day under supervision of the ultrasound faculty, who will evaluate learners using a standardized skills checkoff list. Learners must demonstrate satisfactory attainment of all required skills.

Explanation of Assignments:

Participation: Learners are required to fully participate in the course content, including interactive content, pre-test, post-test, and in-person classroom hands-on activities.

Punctuality: This is a professional level course. All assignments are expected to be submitted on time.

Professionalism Requirement: This is a learning experience for professionals. Assignments are expected to be completed with excellence.

Learners whose evaluation is acceptable will receive the *INMED Professional Certificate in Ultrasound for Primary Care*. Those learners whose evaluation is not acceptable will receive a certificate of participation and the opportunity to remediate.

Remediation:

If a learner does not complete this course and achieve the required competencies, the faculty may require the learner to 1) remediate the component(s) that the learner did not satisfactorily complete, or 2) repeat the entire course within one year of the start date of the original course. The learner will be offered only one opportunity to repeat the course without requiring repeat payment of tuition.

Academic Integrity:

This is a professional-level learning experience. All learners are expected to be self-motivated, to perform with excellence, and to be thoroughly honest throughout their process of learning. If any INMED faculty determines that a learner has committed academic dishonesty by plagiarism, cheating or in any other manner, the faculty member has the right to 1) fail the learner for the particular assignment, project and/or exam, 2) fail the learner for the

entire course, 3) discharge the learner from any future INMED learning experience, including degree, diploma, or certificate completion.

Course Faculty:

David Culpepper, MD, FACP

Dr. Culpepper is an internist and Point of Care Ultrasound Fellow with Ultrasound Leadership Academy. Trained at the University of South Carolina School of Medicine, he practiced general internal medicine for three decades, and today continues with Access Med in Lexington, KY. Dr. Culpepper has provided volunteer medical services to marginalized people in Brazil, Peru, Bolivia, Romania, Kenya, and refugees in Greece. His professional passion is teaching point of care ultrasound skills to those serving around the world in low resource communities.