



How EDE Bootcamps Work

This workshop is unlike any other continuing education. Bootcamp consists of a concentrated, intense hands-on learning experience with one-to-one supervision. A skills assessment with over four hours of exams is included. There is a ten hour online pre-course set of modules to complete as part of a flipped classroom program. In total, over 40 hours of training and learning is involved.

Pre-course

Participants are provided access to the online modules approximately 4 weeks prior to the bootcamp. All needed materials are provided including written content, video tutorials, and pretest questions. If anyone wishes to do further reading, (though not required), one can obtain the *Essentials of Point of Care Ultrasound* by Steve Socransky, available at the Apple iBookstore. There is also a hardcover version available for order. Go to www.ede2course.com for more info. Schedule at least 10 hours to review the online course material. The written exam is challenging, and the failure rate is high for those who do not study well before the workshop.

Canadian Point of Care Society (CPoCUS)

Participants must register for a membership with CPoCUS before bootcamp begins so they can access the exam materials. The CPOCUS website (www.cpus.ca) now offers extensive preparation videos and written modules for most of the bootcamp content and should be reviewed to prepare for the exams.

After completing your didactic materials, participants must attempt the written practice exam at CPOCUS.

This helps confirm active membership and access to the full exam you must take at bootcamp.

You can also take this additional online quiz to prepare: <http://www.pocutoronto.com/ceusquiz.html>

Content

For the CORE Bootcamp program participants will learn to perform scans for detecting global cardiac contractility, pericardial effusions, abdominal aortic aneurysms, abdominal free fluid, 1st trimester pregnancy, pneumothorax, and pleural effusions.

Scanning stations

After an introductory presentation most time is spent moving station to station getting as many scans done as possible on each live model. Approximately 8 minutes is provided per person per model then off to the next station. Initially learners may only finish one scan. Eventually they will be completing 3 or 4 per model. Bootcamp's goal is to not only get someone scanning safely but also efficiently. If it takes 7 minutes to do a single scan in a real clinical setting, this lone data point is not going to be worth the time in a busy practice environment and clinicians will stop using POCUS. As the day progresses there will be less time provided per scan. A timer notifies participants when it's time to change positions with partner and then when it's time to change stations. An instructor signs off on all scans before then move to the next station. In total there are at least 10-12 two-hour scanning sessions scheduled.



Partners

Most learners will be working most of the time with a partner. While one partner scans the other watches and may fill in a logbook. Some courses use a paperless system where the instructor enters all scans into a tablet computer at the bedside. Everyone leaves the course with a logbook fully documenting all supervised scans for certification purposes.

The entire group is continually assessed to determine who are the fastest and slowest scanners. Partners are changed during the day to group fast and slow people together to maximize scanning time and to let the slower scanners observe what helps the fast people scan more quickly.

Feeling overwhelmed?

For those who need more time and dedicated instruction, they may be put on a solo station with no partner for a scanning session to double their practice time. There is always an education supervisor who will be constantly assessing all participants to determine what their strengths and weaknesses are and tailoring the learning experience. Extra models are scheduled for those needing additional practice.

Written Exam

After lunch on day one, half of participants will scan on their own while their partner takes the written exam.

They then switch places after an hour.

The exam is taken online with immediate feedback on incorrect answers.

If the exam is not passed on the first attempt, it can be retaken on the morning of day two, before scanning begins.



Determinate Scans

Each participant must obtain a minimum number of determinate scans that are of adequate quality and show the critical areas of interest for each application. For some models the scans will be indeterminate because of difficulty or time constraints. Understanding when to declare a scan as inadequate and how to incorporate findings into clinical practice is a critical part of the bootcamp program.

Unassisted Scans

Participants must also complete a certain number of scans unassisted by their instructor to prove they are ready for the exams and independent practice.

Logbooks

Each learner will be completing a logbook to document all their scans. The model's initials, age and gender and all attempted scans are checked off and signed by the bedside instructor. Logbooks are useful for quality assurance and for meeting privileging requirements in different practice settings. In most bootcamps an electronic logbook will be filled out by your bedside instructors and the final version emailed to you.

Practical Exams

The practical exams begin at the end of day two and continue day three. Like a structured observed clinical exam, the instructor will follow a check list and ask learners to demonstrate how to prepare to scan, greet and position the patient, generate the image, problem solve the difficult scan, then clean and put away the machine. If a critical error is made, the participant will be informed about how many more scans should do before re-attempting the test to ensure skills and knowledge are at a safe level. If a minor error is made the instructor will discuss the key information and if there is adequate understanding a retest can be conducted immediately.



Visual Exams

On either the end of day two or the end of day three learners will be paired off with an instructor to do the visual exam. These are interactive sessions where they watch videos and images and answer questions. This is where participants get to see pathology and demonstrate how to incorporate findings into clinical management. The visual exam is designed to be both a learning exercise and an assessment of POCUS understanding.

Should critical errors or too many noncritical errors be made during the exam, the instructor will review what went wrong and reinforce important learning points then the learner will repeat that exam module with another instructor.

The visual exam to take approximately 2 hours.

Transvaginal Stations

For physician groups with access to an endocavitary probe, there is an option to arrange a course that includes transvaginal 1st TM OB scanning. You will get to use a simulator with real patient images and scan several live models. As most physicians either do not have an endocavitary probe or do not use it with any regularity, transvaginal scanning is no longer a routine part of the CORE program.



CPoCUS Certification

When a participant has successfully completed all required scans and passed all exams, an application for Independent Practitioner Certification is submitted to the Canadian Point of Care Ultrasound Society (CPoCUS.)

The participant will receive an email from CPoCUS that provides a link should they wish to obtain CFPC or Royal College CME credits and an official certificate. For more information about the organization, go to www.cpus.ca.

Full length days

Participants can expect to start at 0700 and finish at 1800 each day. On day two, some participants can stay until 2000 to attempt the visual exams so they can leave earlier on day three. On day three, most participants are done by 1600 but those who took the longest to complete their scans, or who had to retake exams may finish later. It is strongly recommended to NOT arrange flights or trains for afternoon departures.

Supportive environment

Bootcamp takes the education process very seriously with constant debriefing and improvements to the program. All instructors must complete their own apprentice training process with supervision by master instructors.

Participants learn at different speeds and may need additional assistance. Real-time assessment of each participant is recorded and shared with all instructors. An education supervisor constantly checks in on all learners to determine if more resources or alternative approaches might be required. The goal is to provide an environment where every participant can become safe and confident in performing core point of care ultrasound, regardless of their background or original skillset.

Tentative Schedule

| Day One | |
|-----------|---------------------|
| 0700-0800 | Intro |
| 0800-0900 | scan 1 |
| 0900-0915 | break |
| 0915-1015 | scan 2 |
| 1015-1030 | break |
| 1030-1130 | scan 3 |
| 1130-1145 | break |
| 1145-1245 | scan 4 |
| 1245-1330 | lunch |
| 1330-1430 | scan 5/written exam |
| 1430-1445 | break |
| 1445-1545 | scan 6/written exam |
| 1545-1600 | break |
| 1600-1700 | scan 7 |
| 1700-1715 | break |
| 1715-1815 | scan 8 |

| Day Two | |
|-----------|-------------------|
| 0700-0800 | Written exam redo |
| 0800-0900 | scan 9 |
| 0900-0915 | break |
| 0915-1015 | scan 10 |
| 1015-1030 | break |
| 1030-1130 | scan 11 |
| 1130-1145 | break |
| 1145-1245 | scan 12 |
| 1245-1330 | lunch |
| 1330-1430 | scan 13 |
| 1430-1445 | break |
| 1445-1545 | scan 14 |
| 1545-1600 | break |
| 1600-1700 | scan 15 |
| 1700-1715 | break |
| 1715-1815 | scan 16 |
| 1815-2000 | Visual Exam |

| Day Three | |
|-----------|-------------------|
| 0700-0800 | Written exam redo |
| 0800-0900 | scan 17 |
| 0900-0915 | break |
| 0915-1015 | scan 18 |
| 1015-1030 | break |
| 1030-1130 | scan 19 |
| 1130-1145 | break |
| 1145-1245 | scan 20 |
| 1245-1330 | lunch |
| 1330-1430 | scan 22 |
| 1430-1445 | break |
| 1445-1545 | scan 22 |
| 1545-1600 | break |
| 1600-1800 | Visual Exam |