

ASCeXAM/ReASCE REVIEW COURSE

The most comprehensive review to help you prepare for the NBE certification examinations.

23rd ANNUAL

VIRTUAL EXPERIENCE

Content available on May 9, 2022

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“Doing this
fantastic virtual course
at home, at my own
speed, updated my echo
knowledge immensely.”

*Past Review Course
Attendee*

Featuring:

- Access to All Presentation Recordings, including Physics
- New Faculty and Presentations

Register now at ASEcho.org/ReviewCourse

Program Information

Overview of the ASCeXAM/ReASCE Review Course: Virtual Experience

This online course will be available on **Monday, May 9, 2022**, and will offer access to recordings and PDF slides of all scheduled presentations, including physics. ASE has specifically designed the ASCeXAM/ReASCE Review Course as a preparatory course for the National Board of Echocardiography, Inc.TM (NBE) ASCeXAM[®] and ReASCE[®] examinations. Lectures given will emphasize illustrative cases and as such will not be “canned talks” from other cardiovascular ultrasound courses.

This Review Course will cover all aspects of cardiovascular ultrasound essential to these examinations, including physics, valvular heart disease, strain and 3D imaging, contrast echocardiography, ischemic heart disease, congenital heart disease, and more.

The expert faculty will use case studies and lectures to help prepare attendees for the ASCeXAM[®] or ReASCE[®] examinations. The Review Course has been designed with the computer-based examination administration in mind.

Learning Objectives

- Explain the essential physical principles of cardiac ultrasound.
- Recognize common ultrasound artifacts and their genesis.
- Estimate systolic function using standard M-mode and 2D echocardiography, as well as newer modalities such as strain imaging and 3D echocardiography.
- Identify and quantitate valvular heart disease severity.
- Describe the application of Doppler in the assessment of hemodynamics, diastolic function, and heart failure.
- Perform clinically relevant calculations of valve areas and intracardiac pressures.
- Explain proven techniques for interpreting stress echocardiographic examinations.
- Differentiate features of cardiac tamponade, constrictive pericarditis, and restrictive cardiomyopathy.
- List appropriate applications of echocardiography.
- Recognize newer applications of echocardiography such as myocardial contrast and 3D echocardiography.

Why take the ASCeXAM[®] or ReASCE[®] Examinations?

NBE administers the ASCeXAM[®] and ReASCE[®] examinations to allow physicians to test and demonstrate their knowledge of echocardiography based on an objective standard. The ASCeXAM[®] is the Examination of Special Competence in Adult Echocardiography and is intended for those who wish to demonstrate special competence in all areas of echocardiography. The ReASCE[®] is the Recertification Examination of Special Competence in Adult Echocardiography designed specifically for those who have previously passed the ASCeXAM[®]. The purpose of ReASCE[®] is to promote continued excellence in all areas of echocardiography.

Passing these examinations is mandatory when applying for and maintaining NBE certification in any or all of the following areas: transthoracic echocardiography, transesophageal echocardiography, or stress echocardiography.

The examinations are given at testing centers throughout the United States. The test will consist of one case-oriented block and three multiple choice blocks covering the following content areas:

- physical principles of ultrasound;
- valvular heart disease;
- ventricular size and function, coronary artery disease, cardiomyopathies;
- congenital heart disease and fetal echocardiography;
- cardiac masses, pericardial disease, myocardial contrast, and newer applications of echocardiography.

Questions will test knowledge of M-mode, 2D and Doppler echocardiography, transesophageal, contrast, and stress echocardiography. The case-oriented block will last up to 1½ hours while the other three blocks will last up to 60 minutes per block.

As of now, the ASCeXAM[®] and ReASCE[®] exams will be held on Tuesday, July 26, 2022. More details concerning these examinations can be found on the NBE website at echoboards.org.

Who Should Attend

This course is designed for physicians interested in sitting for the ASCeXAM[®] (Examination of Special Competence in Adult Echocardiography) or the ReASCE[®] (Recertification Examination of Special Competence in Adult Echocardiography), as well as physicians and sonographers interested in a broad review of cardiovascular ultrasound.

Course Registration

Registration fees include all recorded presentations, PDF downloads, post-test questions, Q&A sessions with expert faculty, and 28.75 CME credits. ASE members can take advantage of reduced registration fees as a benefit of membership. Register online today at ASEcho.org/ReviewCourse. Registration closes on July 31, 2022, but registrants will have unlimited on-demand access to course content through August 7, 2022.

The expert faculty will host two 2-hour live Q&A sessions on **Saturday, July 9, 2022, from 10:00 AM – 12:00 PM ET, and 12:30 – 2:30 PM ET**. This will be another opportunity to review additional board type questions, different from those found in the course. It is also a time for faculty to answer your specific questions, review course material, and dive deeper into certain subjects. These live Q&A sessions are included with your course registration, and will be recorded for on-demand viewing. More information on these sessions will be available here in Spring 2022: ASEcho.org/ReviewCourse.

ASE Membership

You are welcome to join or renew your ASE membership when you register for the Review Course. Your membership will be active through **December 31, 2022**.

Membership rates are the same for new and renewing members.

U.S. Physician/Scientist Membership	\$345
U.S. Sonographer/Allied Health/Vet Membership.	\$175
International Membership	\$115
Fellow in Training & Student U.S. and International Membership. . .	\$75
Rising Star U.S. Membership.	\$160
Rising Star International Membership.	\$100
Professional Industry Affiliate	\$345
Retired U.S. and International Membership.	\$100

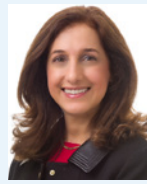
ASE serves its members in numerous ways by providing education, advocacy, research, practice guidelines, and a community for their profession. ASE membership includes over \$750 of FREE CME credits a year, in addition to discounts on all ASE educational courses and products. Also included is a monthly subscription to the *Journal of the American Society of Echocardiography* (JASE), access to CASE, ASE's online case reports journal, help with legislative coding and reimbursement issues, and other career resources. A plethora of online tutorials, webinars, and other educational activities make membership beneficial to echocardiographers located around the world. View the extensive list of member benefits at ASEcho.org/Benefits.

Accreditation and Designation

The CME Evaluation will be available beginning July 9, 2022. The American Society of Echocardiography is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

ASE designates this live activity for a maximum of **28.75 AMA PRA Category 1 Credits™** pending approval. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Successful completion of this CME activity enables the participant to earn up to **28.75 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program**. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity.



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Faculty Disclosures

Disclosure Statement

ASE is committed to ensuring that its educational mission, and all accredited continuing educational programs provide a protected space to learn, teach, and engage in scientific discourse free from influence from organizations that may have an incentive to insert commercial bias into education.

While a monetary or professional affiliation with an ineligible company does not necessarily influence a speaker's presentation, the Standards for Integrity and Independence in Accredited Continuing Education and policies of the ACCME require that all financial relationships with ineligible companies be identified and mitigated prior to engaging in an accredited CE activity. In accordance with these policies, ASE actively identified relevant financial relationships between faculty in control of this accredited CE activity and ineligible companies and implemented mitigation strategies to eliminate any potential influence from persons or organizations that may have an incentive to insert commercial bias in this activity.

The following faculty members do not have any relationships with industry/commercial supporters to disclose:

Benjamin Eidem, MD, FASE
Steven Lester, MD, FASE
Rekha Mankad, MD, FASE
Sunil Mankad, MD, FASE
Akhil Narang, MD
Vera Rigolin, MD, FASE
Sangeeta B. Shah, MD, FASE

The following faculty members do have financial relationships with industry/commercial supporters to disclose:

Karima Addetia, MD – Pfizer (Research Funding)
Gerard Aurigemma, MD, FASE – TomTec (Speaker/Speaker's Bureau)
Renuka Jain, MD, FASE – Medtronics (Speaker/Speaker's Bureau)
Noreen Kelly, MD, FASE – Abbott (Speaker/Speaker's Bureau)
Lucy Safi, DO, FASE – Abbott (Speaker/Speaker's Bureau)
Muhamed Saric, MD, PhD, FASE – Abbott (Speaker/Speaker's Bureau); Boston Scientific (Speaker/Speaker's Bureau); Medtronic (Speaker/Speaker's Bureau); Siemens (Consultant/Advisor)

The following members of the ASE CME Committee (not serving as faculty) do not have any relationships with industry/commercial supporters to disclose:

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Bindu Chebrolu, MD, FACC, FASE – Rising Star Representative
Anita Wokhlu, MD, FASE – Member at Large

Mary Corretti, MD, FASE – Member at Large
Eric Kallstrom, MBA, ACS, RDCS, FASE – Member at Large
Pilar Stevens-Haynes, MD – Member at Large
Varsha Tanguturi, MD – Member at Large
Renee Bullock-Palmer, MD, FASE – Member at Large
Michelle Klein-Neville, RDCS – Member at Large
Jiapeng Huang, MD, PhD, FASA, FASE – Member at Large
Kelly Boegel, ACS, RCCS, RCS, FASE – Member at Large
Ihab Hamzeh, MD – Member at Large
Kristie Faust-Gomez, BS, ACS, RDCS, RVT, RT(R), FASE – Member at Large
Bruce Landeck, II, MD, FASE – Member at Large
Nidhish Tiwari, MD, FASE, FACC, FACP – Member at Large
Ambika Nayar, MD, FASE – Member at Large

All members of the ASE staff who were involved in the planning and implementation of this activity do not have any relationships with industry/commercial supporters to disclose:

Kelly Joy, CMM, PMED, Healthcare Meetings Manager
Christina LaFuria, Director of Education
Jaclyn Levine, CMP, Senior Director of Meetings
Robin Wiegerink, MNPL, Chief Executive Officer

Course Content

TTE, TEE, Right and Left Ventricular Hemodynamics, Endocarditis, Chamber Quantitation, Systolic Function, and Handheld Echo

Welcome and Overview of ASCeXAM/ReASCE Exam	<i>V. Rigolin</i>
Normal TTE Examination: Doppler Echocardiography and Normal Antegrade Flow Patterns	<i>N. Kelly</i>
Normal TEE Examination: Applications, Pitfalls, Probe Insertion and Manipulation, Risks and Complications	<i>R. Jain</i>
Echo-Doppler Assessment of Right and Left Ventricular Hemodynamics	<i>G. Aurigemma</i>
Endocarditis and Its Complications: The Role of Echocardiography	<i>R. Jain</i>
Chamber Quantitation: Left Ventricle, Left Atrium, Aorta (2D & 3D)	<i>G. Aurigemma</i>
Global and Regional Systolic Function: Basics of Remodeling, Hypertrophy, and Left Ventricular Mass	<i>G. Aurigemma</i>
Handheld Echo	<i>M. Saric</i>

Spectral Doppler, Deformation, Stress Echo, Mitral Stenosis, Mitral Valve Disease, and Mitral Regurgitation

Spectral Doppler and M-Mode Echo Cases	<i>G. Aurigemma</i>
Deformation Imaging	<i>S. Lester</i>
Stress Echocardiography: Theoretical and Practical Considerations	<i>N. Kelly</i>
Mitral Stenosis	<i>R. Mankad</i>
Degenerative Mitral Valve Disease	<i>K. Addetia</i>
Functional Mitral Valve Disease	<i>V. Rigolin</i>
Hemodynamic Assessment of Mitral Regurgitation	<i>S. Mankad</i>

Mitral Valve Prostheses, Aortic Stenosis, Hypertrophic Cardiomyopathy, Systemic Disease, and Formulas

Echocardiographic Evaluation of Mitral Valve Prostheses	<i>L. Safi</i>
How to Assess Aortic Stenosis	<i>V. Rigolin</i>
Different Variants of Aortic Stenosis	<i>S. Mankad</i>
Hypertrophic Cardiomyopathy	<i>S. Lester</i>
The Athlete's Heart	<i>N. Kelly</i>
Echocardiography in Systemic Disease	<i>R. Mankad</i>
Which Formulas Should I Know for the Exam?	<i>A. Narang</i>

Physics, Knobology, Artifacts, Right Ventricular Function, Tricuspid and Pulmonary Valve Disease

Basic Ultrasound Physics	<i>M. Saric</i>
Concepts of Imaging and Knobology	<i>R. Mankad</i>
Fundamentals in Doppler Physics	<i>M. Saric</i>
Artifacts: Theory and Illustrative Examples	<i>M. Saric</i>
Evaluation of the Right Ventricle	<i>V. Rigolin</i>
Tricuspid and Pulmonary Valve Disease	<i>K. Addetia</i>
More Formulas I Know for the Exam	<i>A. Narang</i>

Aortic Regurgitation, Aortic Prosthesis, Cardiac Masses, Myocardial Infarction, and Interventional Echocardiography

Quantitation of Aortic Regurgitation	<i>V. Rigolin</i>
Evaluation of Aortic Prosthesis	<i>S. Mankad</i>
Cardiac Masses and Cardiac Sources of Embolism	<i>A. Narang</i>
Complications of Myocardial Infarction	<i>S. Mankad</i>
Primer of Interventional Echo	<i>R. Jain</i>

Contrast, Congenital Heart Disease, Diastolic Function, Pericardial Disease, Diseases of the Aorta, Heart Failure, and Left Ventricular Assist Devices

Contrast Echocardiography	<i>K. Addetia</i>
Commonly Encountered Congenital Heart Disease in Adults	<i>S. Shah</i>
Pregnancy and Heart Disease	<i>S. Shah</i>
Congenital Heart Disease: An Approach for Simple and Complex Anomalies	<i>B. Eidem</i>
Primer on Fetal Echo	<i>B. Eidem</i>
Echocardiographic Evaluation of Diastolic Function and Findings in Normal Aging	<i>S. Lester</i>
Echocardiographic Evaluation of Pericardial Disease: Constriction vs. Restriction	<i>L. Safi</i>
Diseases of the Aorta	<i>M. Saric</i>
Echocardiography in Heart Failure, Left Ventricular Assist Devices, and Heart Transplant	<i>K. Addetia</i>

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ASE would like to thank our Industry Roundtable Partners



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