VIRTUAL EXPERIENCE
Content available on May 9, 2022

Course Director
Vera H. Rigolin, MD, FASE
Past President, ASE
Northwestern Medicine
Chicago, IL

Course Co-Director
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New York, NY

“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
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, constractive 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 echoboard.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.

Invited Faculty

Course Director

Vera H. Rigolin, MD, FASE
Past President, ASE
Northwestern Medicine
Chicago, IL

Course Co-Director

Muhamed Saric, MD, PhD, FASE
New York University
New York, NY

Expert Faculty

Karima Addetia, MD, FASE
University of Chicago Medical Center
Chicago, IL

Gerard P. Aurigemma, MD, FASE
UMass Memorial Medical Center
Worcester, MA

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Rochester, MN

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Milwaukee, WI

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Charlotte, NC

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Scottsdale, AZ

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Rochester, MN

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Hackensack University Medical Center
Hackensack, NJ

Sangeeta B. Shah, MD, FASE
Virginia Commonwealth University
Richmond, VA
Course Content

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

- Welcome and Overview of ASCeXAM/ReASCE Exam  
  V. Rigolin

- Normal TTE Examination: Doppler Echocardiography and Normal Antegrade Flow Patterns  
  N. Kelly

- Normal TEE Examination: Applications, Pitfalls, Probe Insertion and Manipulation, Risks and Complications  
  R. Jain

- Echo-Doppler Assessment of Right and Left Ventricular Hemodynamics  
  G. Aurigemma

- Endocarditis and Its Complications: The Role of Echocardiography  
  R. Jain

Normal TTE Examination: Doppler Echocardiography and Normal Antegrade Flow Patterns

Normal TEE Examination: Applications, Pitfalls, Probe Insertion and Manipulation, Risks and Complications

Echo-Doppler Assessment of Right and Left Ventricular Hemodynamics

Endocarditis and Its Complications: The Role of Echocardiography

Chamber Quantitation: Left Ventricle, Left Atrium, Aorta (2D & 3D)

- Global and Regional Systolic Function: Basics of Remodeling, Hypertrophy, and Left Ventricular Mass  
  G. Aurigemma

- Handheld Echo  
  M. Saric

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

- Spectral Doppler and M-Mode Echo Cases  
  G. Aurigemma

- Deformation Imaging  
  S. Lester

- Stress Echocardiography: Theoretical and Practical Considerations  
  N. Kelly

- Mitral Stenosis  
  R. Mankad

- Degenerative Mitral Valve Disease  
  K. Addetia

- Functional Mitral Valve Disease  
  V. Rigolin

- Hemodynamic Assessment of Mitral Regurgitation  
  S. Mankad

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

- Echocardiographic Evaluation of Mitral Valve Prostheses  
  L. Safi

- How to Assess Aortic Stenosis  
  V. Rigolin

- Different Variants of Aortic Stenosis  
  S. Mankad

- Hypertrophic Cardiomyopathy  
  S. Lester

- The Athlete’s Heart  
  N. Kelly

- Echocardiography in Systemic Disease  
  R. Mankad

- Which Formulas Should I Know for the Exam?  
  A. Narang

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

- Basic Ultrasound Physics  
  M. Saric

- Concepts of Imaging and Knobology  
  R. Mankad

- Fundamentals in Doppler Physics  
  M. Saric

- Artifacts: Theory and Illustrative Examples  
  M. Saric

- Evaluation of the Right Ventricle  
  V. Rigolin

- Tricuspid and Pulmonary Valve Disease  
  K. Addetia

- More Formulas I Know for the Exam  
  A. Narang

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

- Quantitation of Aortic Regurgitation  
  V. Rigolin

- Evaluation of Aortic Prosthesis  
  S. Mankad

- Cardiac Masses and Cardiac Sources of Embolism  
  A. Narang

- Complications of Myocardial Infarction  
  S. Mankad

- Primer of Interventional Echo  
  R. Jain

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

- Contrast Echocardiography  
  K. Addetia

- Commonly Encountered Congenital Heart Disease in Adults  
  S. Shah

- Pregnancy and Heart Disease  
  S. Shah

- Congenital Heart Disease: An Approach for Simple and Complex Anomalies  
  B. Eidem

- Primer on Fetal Echo  
  B. Eidem

- Echocardiographic Evaluation of Diastolic Function and Findings in Normal Aging  
  S. Lester

- Echocardiographic Evaluation of Pericardial Disease: Constriction vs. Restriction  
  L. Safi

- Diseases of the Aorta  
  M. Saric

- Echocardiography in Heart Failure, Left Ventricular Assist Devices, and Heart Transplant  
  K. Addetia
The ASCeXAM/ReASCE Online Practice Exam Simulation is designed to prepare physicians for the National Board of Echocardiography’s ASCeXAM® or ReASCE® certification examinations. Developed by renowned experts in the field of echocardiography, the test bank consists of 300 multiple choice questions containing over 400 images and videos covering: the physical principles of cardiovascular ultrasound; valvular heart disease; ventricular size and function; coronary artery disease and cardiomyopathies; congenital heart disease and fetal echocardiography; as well as cardiac masses, pericardial disease, myocardial contrast, and the latest applications in echocardiography. M-mode, 2-Dimensional, and Doppler echocardiography are also covered.

In addition to objective-based questions, case studies are included to evaluate your knowledge of the field. After purchasing this exam simulation, you have access for 18 weeks and are given the opportunity to take two simulated exams consisting of 150 questions each, assessing your skills and knowledge in all areas. You may repeat these exams a total of six times. The grading and feedback for all six attempts will be saved. In addition to an overall grade, a percentage breakdown of your incorrect and correct answers over the five categories will be provided for each attempt, allowing you to focus your study accordingly. Feedback includes explanations of the correct and incorrect answers, offering valuable instruction.

The American Society of Echocardiography strives to be the premier source for ASCeXAM/ReASCE preparation.

Take advantage of this valuable preparation tool
$199 ASE Members
$250 Nonmembers

Visit ASELearningHub.org to purchase now!

In a recent survey conducted by ASE, 97% of the people who took ASE’s ASCeXam/ReASCE Review Course and used the Simulation Exam passed the echo boards.
Your ASCeXAM/ReASCE Review Course registration fee includes all recorded presentations, post test questions, Q&A session with faculty, and 28.75 CME credits.

Name: 

FIRST NAME  MIDDLE INITIAL  LAST NAME

Credential:  [ ] MD  [ ] DO  [ ] PhD  [ ] RN  [ ] RCS  [ ] RDACS  [ ] Other

Institution:

Email Address:  (All correspondence regarding your registration including your confirmation will be sent to this email address.)

Street Address:  

City: 

State/Province: 

Zip/Postal Code: 

Country: 

Telephone:  Fax:

ASE encourages participation by all individuals. If you have a disability or other specific needs, advance notification will help ASE to better serve you. Please contact ASE by email at ASEVirtual@ASEcho.org or by telephone at 919-861-5574.

I have reviewed the ASE Code of Conduct for Virtual Events here: ASEcho.org/ASE-Code-of-Conduct

**Registration Fees**

Prices include access to all online lecture recordings, post test questions, and Q&A session with faculty.

<table>
<thead>
<tr>
<th>Membership Category</th>
<th>Member Pricing Through July 31, 2022</th>
<th>Nonmember Pricing Through July 31, 2022</th>
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<tr>
<td>Physician</td>
<td>$1,075</td>
<td>$1,275</td>
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<tr>
<td>Sonographer/Allied Health/Veterinarian</td>
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<td>$1,060</td>
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<tr>
<td>Fellow</td>
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<tr>
<td>International*</td>
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<td>$825</td>
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*International registration is available for anyone who resides outside of the United States.

**ASE Membership Renew or Join Today!**

Please enter your membership category and dues rate here.*

*Please visit ASEcho.org/Pricing for more information.

**ASCeXAM/ReASCE Online Practice Exam Simulation**

Order your ASCeXAM/ReASCE Online Practice Exam at the same time you register. $199 ASE member $250 Nonmember.

**Payment Information** Payment must accompany this form.

☐ Check (payable to American Society of Echocardiography in U.S. dollars drawn on a U.S. bank) Credit Card: ☐ Visa ☐ MasterCard ☐ American Express

Cardholder’s Name:  

Card Number:  Expiration Date:  CVC #: 

Registration cancellation fees may apply and ASE reserves the right to determine if a refund is possible. Please see the full cancellation policy online at ASEcho.org/ReviewCourse.