

Resources used for teaching Sonography specific subjects

RADY 5030: Ultrasound Physics and Instrumentation

Learnonline site with links to relevant readings.
eBooks and eReadings to assist and facilitate learning.
Online practice quizzes embedded within each module.
Summative online quizzes to cover learning modules.
Lecture and tutorial videos.

Real time zoom sessions which are also recorded.

RADY 5024: Professional Issues for Sonographers

Learnonline site with guided teaching and learning materials. Ongoing tutorial discussion activities to promote analysis of weekly module content. Online simulation activities. Optional introductory skills workshop using high-fidelity simulators and ultrasound machines.

RADY 5013: Abdominal Sonography

This course utilises a self-directed learning approach with online materials divided into 9 modules spread over the study period. Students engage in SIMTICS interactive simulations, attend an optional hands-on workshop, an online workshop, and zoom synchronous classes are run on a weekly basis to consolidate knowledge learned during their module work. These facilitate revision and Q&A with the course coordinator in real time, with these sessions also being recorded. Resources for this course also include a specific abdominal sonography study guide, lecture recordings, recommended e-books, and e-Readings. Additional resources include a revision section for exam revision time, practice online quizzes, and a course discussion forum for student and course coordinator interaction. Assessments consist of a two-part written assessment based on 2 different case scenarios and a final 3-hour online exam which tests students on all modules for the course requiring them to apply their learnings to the clinical setting.

Learning Resources List:

- 1. SIMTICS interactive modules
- 2. Study guide
- 3. lecture recordings
- 4. Real time scanning videos to demonstrate how to perform abdominal sonography examinations of each organ/region included within an abdominal ultrasound examination
- 5. Learning notes, and images within modules
- 6. Recommended e-books and e-Readings
- 7. Real time zoom sessions which are also recorded
- 8. Revision section with exam information and practice exams
- 9. Online quizzes (formative for practice within each module and also 4 quizzes that are summative assessments)
- 10. Discussion forum for student and course coordinator interaction
- 11. Hands-on workshops with abdominal simulators where students attend an on-campus workshop
- 12. Written assessments x 2 based on real world clinical case scenarios
- 13. Final 3-hour exam covering all modules students must pass this to pass the course

RADY 5015: Superficial Parts Sonography

eBooks and eReadings to facilitate learning



Online practice quizzes to cover learning modules.

Summative online quizzes to cover learning modules

Scanning Workshop to promote scanning skills and protocols with a combination of phantom and live-model scanning

SIMTICS application to assist students without a placement to understand scanning planes and transducer manipulation

Module revision sessions with recorded lectures and virtual classroom components

A step-by-step Module guide via the learnonline site for working through the subject

Case study written and presentation authentic assignments to develop skills encountered during daily scanning practice.

Final 2-hour exam (with added one hour) used to test the knowledge of the students across topics from any of the learning modules in the course.

RADY 5014: Obstetric and Gynaecologic Sonography:

Study Guide, Course Outline, e-reader, e-books through library, Practice image interpretation questions, UniSA video lectures, expert guest lectures, formative questions and answers, quizzes, PowerPoint presentations links to external resources such as ISUOG, and several other external websites and journal articles. We also have practical skills and revision workshops where students can practice on simulators and ultrasound Phantoms.

Summative online quizzes to cover learning modules, including the reflective bounce back activity to teach communication in challenging patient situations.

Complex problem-solving poster assessment to develop critical thinking and clinical reasoning necessary to conduct obstetric examinations.

RADY 5029: Musculoskeletal Sonography

This course utilises a self-directed learning approach with online materials divided into 10 modules spread over the study period. Students attend an optional hands-on workshop, an online workshop, and zoom synchronous classes are run on a weekly basis to consolidate knowledge learned during their module work. These facilitate revision and Q&A with the course coordinator in real time, with these sessions also being recorded. Resources for this course also include a specific musculoskeletal sonography study guide, lecture recordings, recommended e-books, and e-Readings. Additional resources include a revision section for exam revision time, practice online quizzes, and a course discussion forum for student and course coordinator interaction. There are also lectures that demonstrate real time scanning delivered by a musculoskeletal sonography expert. Assessments consist of a case study on the shoulder where students must submit images that they have acquired themselves of a shoulder ultrasound examination and explain and reflect on this scan. They also have a final 3-hour online exam which tests students on all modules for the course requiring them to apply their learnings to the clinical setting.

Learning Resources List:

- 1. Discussion forums for student and course coordinator interaction
- 2. Recorded video for course overview/expectations/assessment information
- 3. Short presentations embedded within modules for flexible learning
- 4. Module-specific PowerPoint presentations delivered by musculoskeletal sonography experts
- 5. Real time scanning videos to demonstrate how to perform MSK examinations of each region
- 6. Recommended e-readings for each module
- 7. Various learning resources for each module (PDFs, YouTube videos, journal articles, practice quizzes)



- 8. Recommended texts accessible on both the learn online page and university library
- 9.An assignment that is evidence based and aligns with clinical practice development enabling students to refine skills learnt within their clinical placement role.
- 10. Final 3-hour exam covering all modules students must pass this to pass the course
- 11. Real time zoom sessions which are also recorded
- 12. Revision specific section on the course learn online site opened at end of module work for course

RADY 5016: Vascular Sonography

eBooks and eReadings to assist and facilitate learning.

Online practice quizzes embedded within each module.

Summative online quizzes to cover learning modules.

Scanning workshop to promote scanning skills and protocols with a combination of live model scanning and simulators.

SIMTICS application to assist students with scanning protocols and probe manipulation and scanning planes.

Module revision sessions with recorded lectures and virtual classroom components

Step by step module guides via the learnonline site for working through the subject.

Assignments: 2 parts, 1. Doppler Optimization and 2. Clinical Decision-Making Case study assignment to develop skills encountered during vascular scanning

Final 2-hour exam used to test students' knowledge gained from any of the modules, including MCQ, T&F, and case study submissions.

RADY 5026: Clinical Sonography Portfolio

Online virtual classrooms detailing requirements along with to learnonline pages. Students have access to all previous learnonline sites and resources to assist in revision. Access to SIMTICS for certain studies to assist with OSCE preparation. Virtual Classroom and discussion board sessions available to students through the semester. Readings, and optional on campus workshop available in the lead up to Practical Assessments.

RADY 5027: Fetal Echocardiography

Study Guide, Course Outline, e-reader, e-books through library, Practice image interpretation questions, u-tube links, video lectures, formative questions and answers, quizzes, PowerPoint presentations, web links to external resources such as ISUOG, SONOWORLD and several other external websites and journal articles.

RADY 5002: Breast Sonography

Study Guide, e-reader, e-books through library, You -tube links, quizzes, PowerPoint presentations, exemplar student assignment, web links to external resources and several other external websites and journal articles.

eBooks and eReadings to facilitate learning.

Online practice quizzes to cover learning modules.

Summative online quizzes to cover learning modules.

SIMTICS application to assist students without a placement to understand scanning planes and transducer manipulation.

Module revision sessions with recorded lectures and virtual classroom components A step-by-step Module guide via the learn online site for working through the subject



Case study written authentic assignments to develop skills encountered during daily scanning practice.

Continuous assessment consisting of 4 parts, all with real-job authentic components, such as SIMTICS simulation, problem solving Q&A, reflective bounce back activity to teach communication in challenging patient situations AND AUDIO PRESENTTAION.

RADY 5025: Advanced Musculoskeletal Sonography

This online modular course follows a structured study calendar, with discussion forums for student-lecturer interaction. Introductory information includes a course outline, assessment details, and general resources related to studying at university and musculoskeletal sonography. A recorded video introduces students to the course and the expectations for the study period and also discusses requirements for assessments and where to find the required information to complete these successfully. Students access short PowerPoint presentations recorded by well-regarded expert sonographers, module-specific You-Tube videos, and recommended e-books and e-readings. Modules also feature various learning resources such as PDFs, practice quizzes and journal articles related to the module topic. A specially designated discussion forum facilitates students to upload and share their case study assignments and this is where student's complete parts B and C discussions for their assignment. There is also an Online Image Interpretation Quiz is part of the assessment requirements for this course. Students must pass this in order to pass the course.

Learning Resources List:

- 1. Discussion forums for student and course coordinator interaction
- 2. Recorded video for course overview/expectations/assessment information
- 3. Short presentations embedded within modules for flexible learning
- 4. Module-specific PowerPoint presentations delivered by musculoskeletal sonography experts
- 5. Recommended e-readings for each module
- 6. Various learning resources for each module (PDFs, YouTube videos, journal articles, practice quizzes)
- 7. Recommended texts accessible on both the learn online page and university library
- 8. Online Image Interpretation Quiz as part of the assessment
- 9. Two assignments that are evidence based and align with clinical and research practice development

RADY 5031: Adv Obstetric and Gynaecologic Sonography

Study Guide, Course Outline, e-reader, e-books through library, Practice image interpretation questions, u-tube links, video lectures, formative questions and answers, quizzes, PowerPoint presentations, web links to external resources such as ISUOG, SONOWORLD and several other external websites and journal articles.

RADY 5034 Advanced Vascular Sonography

The course is online and modularised, with students advised to attend to each module in a time frame documented on the study calendar. Discussion forums are available online for students to ask their lecturer questions and to engage with their fellow students. Introductory information includes an outline of the course, outline of the assessments and general resources including an electronic copy of the course outline and study guide, links to relevant websites and learning activities. Virtual classrooms are recorded that acts as an introduction, and tutorial sessions with this course. Visiting lecturers offer advice and guidance in specialised vascular scanning regions.



Assessments include summative quizzes, assignments (Clinical Decision Marking and Performance – ABI study) which assesses students advanced vascular capabilities from a clinical setting. There are recommended e-readings for each module. Links to various learning resources are provided for students within each of the modules – these may be PDF files, You-tube videos or journal articles. There are recommended text that can be accessed from the learnonline page. A final exam is provided which includes MCQ and Case study assessments. Optional on campus workshop is available for students.