

**MERRYL N. FULMER, R.T.
(R)(M)(MR)(QM)(CT)
DIAGNOSTIC IMAGING
SPECIALIST**
WWW.MERRYLFULMER.COM

**WANT TO LEARN HOW TO TAKE
THE ARRT EXAM & PASS IT???**



**National Radiologic Technology Week
November 7 – 15, 2021**

Let's celebrate – special price for this presentation!

Sunday, November 7, 2021
3:00 pm till 5:30 pm EST
Only \$25.00 for 2.5 hrs.
Pre-registration required
Lecture will be recorded
Need not be present BUT you must preregister
www.merrylfulmer.com





1

I CAN HELP YOU PASS YOUR ARRT BOARDS!

Over 45 years experience
Thousands of students!!!!


2

TODAY'S OBJECTIVES

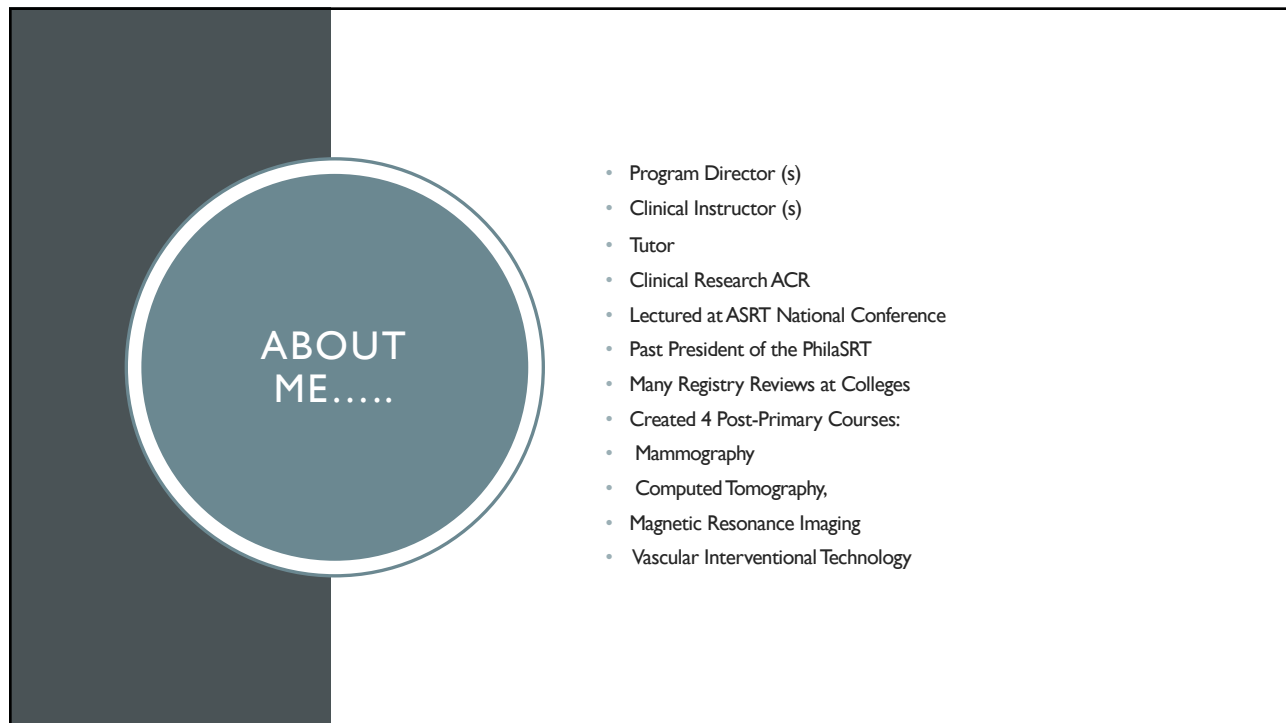
- 1. Tell you about myself
- 2. Discuss your upcoming Registry Exam
- 3. Tele-tutoring
- 4. Post-Primary Courses
 - Mammography ((M)
 - MRI (MR)
 - Computed Tomography (CT)
 - Vascular Interventional (VI)

3



- About to take the ARRT (R) exam
- May not have taken it yet
- May have taken it and failed once
- May have taken it and failed twice
- May have taken it and failed 3X
- Extremely anxious & scared
- All over the place
- Not sure how to study/prepare

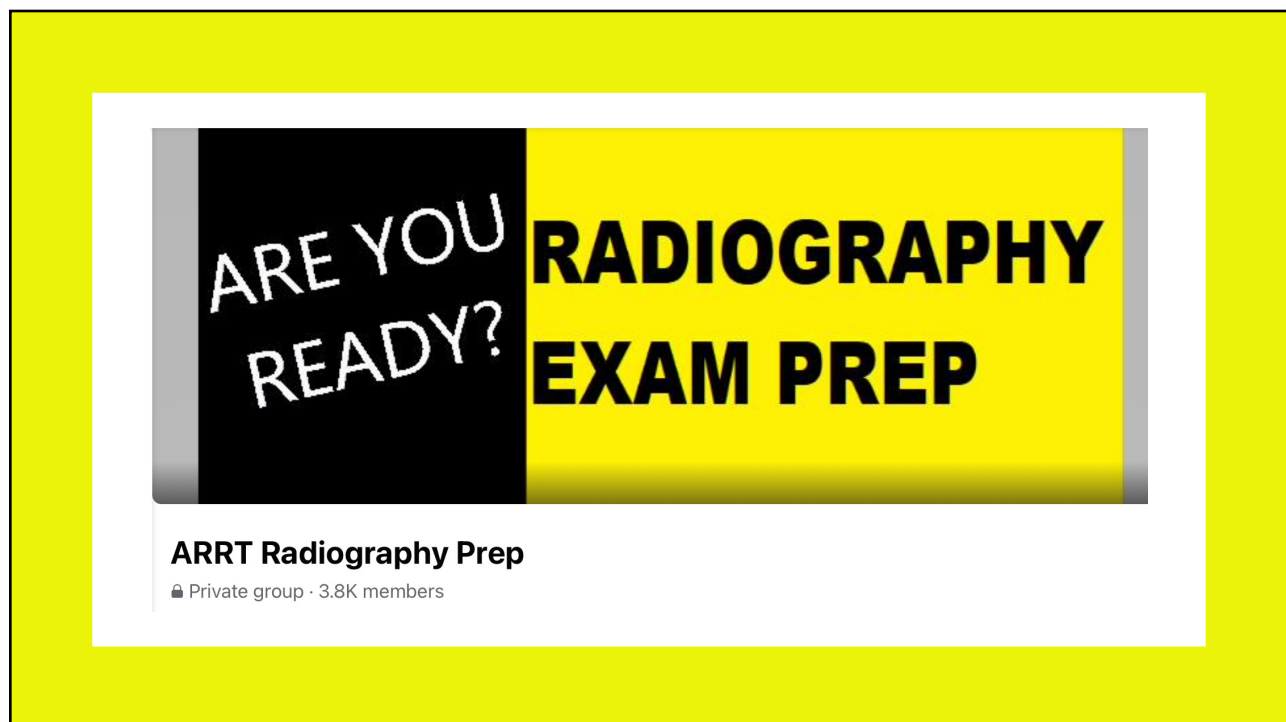
4



ABOUT ME.....

- Program Director (s)
- Clinical Instructor (s)
- Tutor
- Clinical Research ACR
- Lectured at ASRT National Conference
- Past President of the PhilaSRT
- Many Registry Reviews at Colleges
- Created 4 Post-Primary Courses:
- Mammography
- Computed Tomography,
- Magnetic Resonance Imaging
- Vascular Interventional Technology

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ARE YOU READY? RADIOGRAPHY EXAM PREP

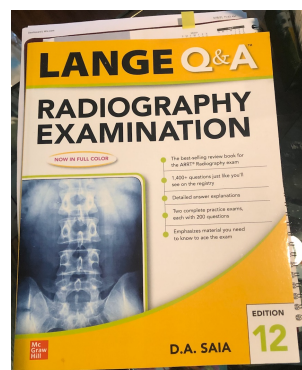
ARRT Radiography Prep
 Private group · 3.8K members

6

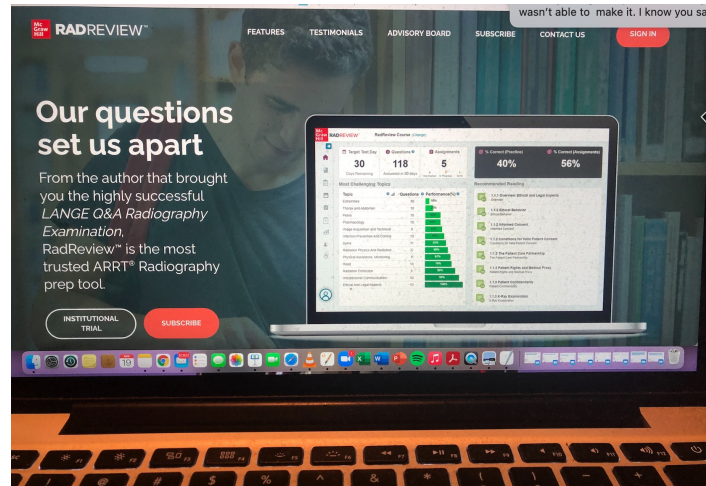
THE MOST POPULAR STUDY TOOLS:

- Rad Review Easy – On-line, book(s), flash cards
- Rad Tech Boot Camp
- Corectec
- Mosby
- Kettering Review
- X-ray Coach
- SEAL Exams
- Hesi Exams

7



8




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McGraw-Hill's **RADREVIEW Easy**™ The #1 Choice for ARRT Exam Preparation


Home Subscribe Sample Exam Sample Performance Profile About Log In via Athens

Advisory Board



Editor-In-Chief:
Dorothy A. Saia, MA, RT(R)(M)

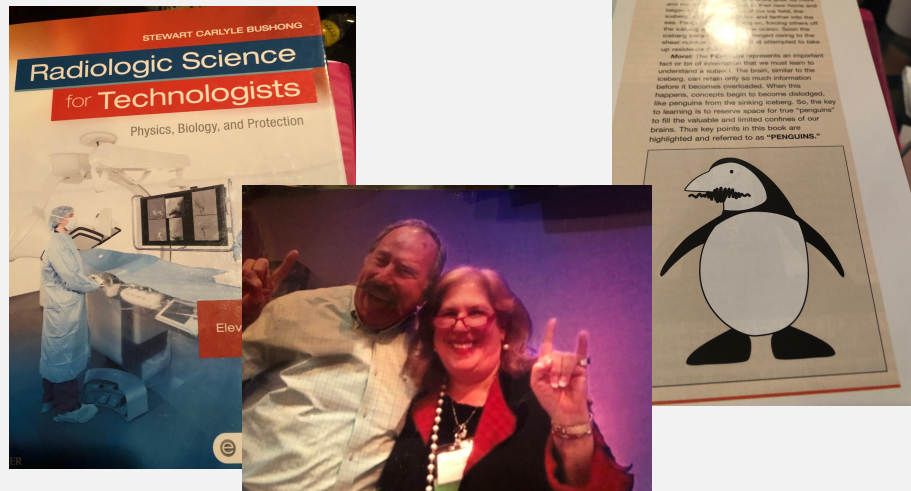
Dorothy Saia has been active in radiography education for almost 40 years. Saia pursued her professional radiography studies at Danbury Hospital, Danbury CT, where she rose to become Program Director in radiography. She received her graduate degree in education from Sacred Heart University in Fairfield, CT. Saia has been the director of the program in radiography at the Stamford Health System in Stamford, CT, for more than 25 years. She has been active in state and regional professional societies and has lectured extensively at local, state, and regional professional meetings. Her radiography review books are recognized everywhere by students and instructors alike, and she continues to participate in and sponsor continuing education and certification exam reviews.



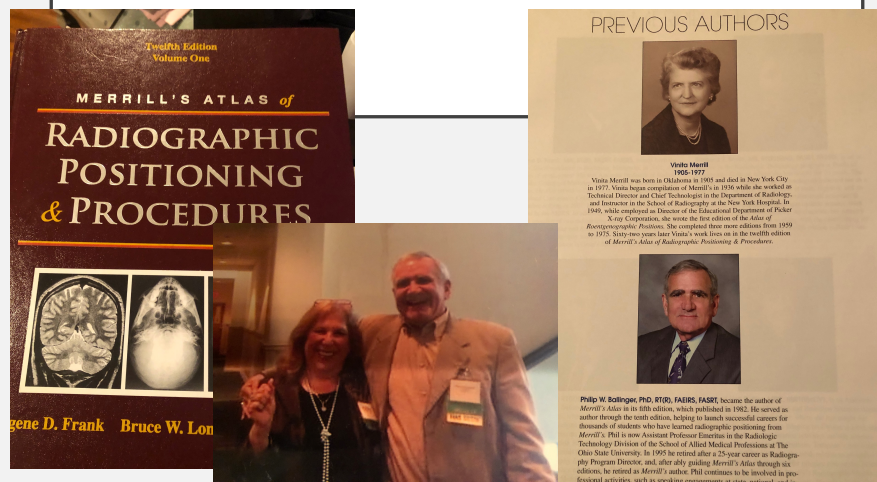
Associate Editor:
Merryll Fulmer, BS, RT(R)(M)(MR)(QM)(CT)

For 40 years, Merryll Fulmer has been involved in many aspects of radiology academia, including serving as Program Director, Clinical Instructor, and Adjunct Faculty at various colleges and universities, and Clinical Trials Trainer for the American College of Radiology. A past president of the PhilaSRT, she is also dedicated to other state societies through volunteering and lecturing. Fulmer developed and teaches an Initial Training in Mammography Program, which is currently in its twelfth year and going strong. Her biggest passion is tutoring individuals, who are preparing to take the national certification exams by the ARRT for primary and post-primary certification.

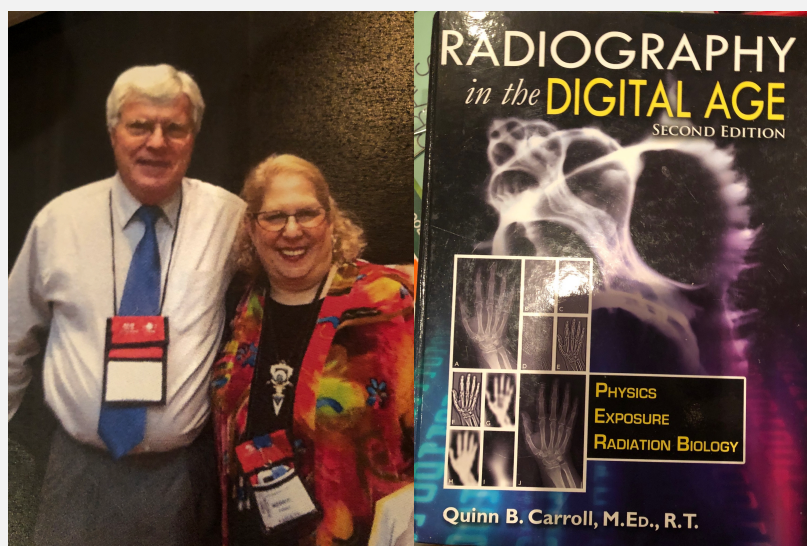
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11



12



13

Albert Einstein Hospital

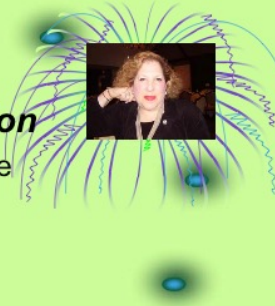
- In 1975-1977
- Merryl started at Albert Einstein Medical center Staff Technologist



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- ***Program Director
Of Radiologic Technology Education***

- Providing Students with the ability to provide patients with high-quality care during the performance of any diagnostic radiologic procedure.



• **Chestnut Hill Hospital**



Lyons
Technical
Institute



• **Abington Memorial Hospital**



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SHORE
MEDICAL
CENTER



16

Adjunct Faculty teaching Radiology Courses

- *Holy Family University*
- *Hahnemann University*
- *Drexel University*
- *Community College of Philadelphia*
- *Gwynedd-Mercy College*



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Lecturer

- HUP – Lecturer for the Center for Continuing Education
- RT Career Education – National Lecturer for this provider of CE
- Lecture to symposium audiences of up to 400 at numerous professional meetings locally as well as throughout the United States on a regular basis




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American College of Radiology

- 2004 through June 2009
- Clinical Trials Trainer**
 - Passing on her knowledge to help the ACR staff within the clinical trials




Berenice Findle Post Award
from
The Philadelphia Society of Radiologic Technologist

In 2001 Meryll Fulmer, B.S. RT (R)(M)(MR)(QM)(CT) received the **Berenice Findle Post Award** to formally acknowledge exceptional members for past and present merit and service to Radiologic technology in general and the PhilaSRT in particular and various areas outside the profession.





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MERRYL N. FULMER

B.S., R.T. (R) (M) (MR) (QM) (CT)



LIFE TIME ACHIEVEMENT AWARD



21

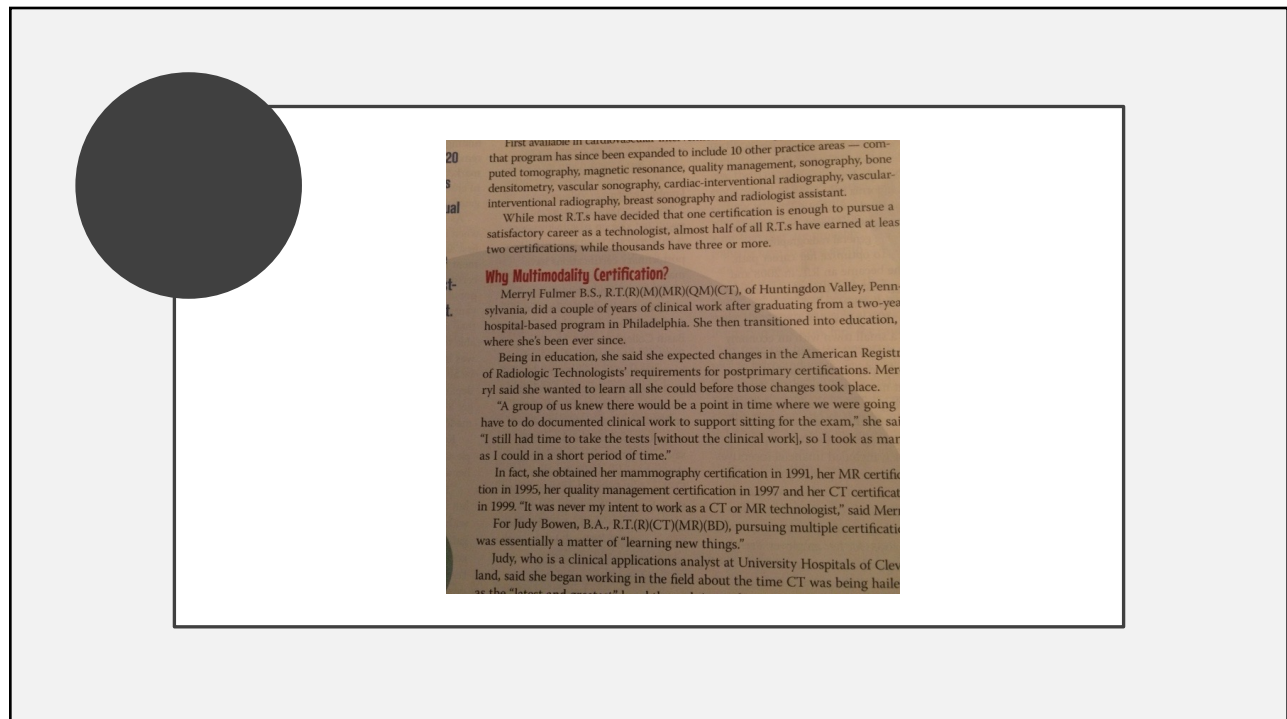
ADELINE J. EICHOLZ
MEMORIAL LECTURER AWARD
PRESENTED ANNUALLY TO AN
EDUCATOR WHO HAS MADE A
SIGNIFICANT CONTRIBUTION TO
THE PROFESSION OR TO THE
CONFERENCE.



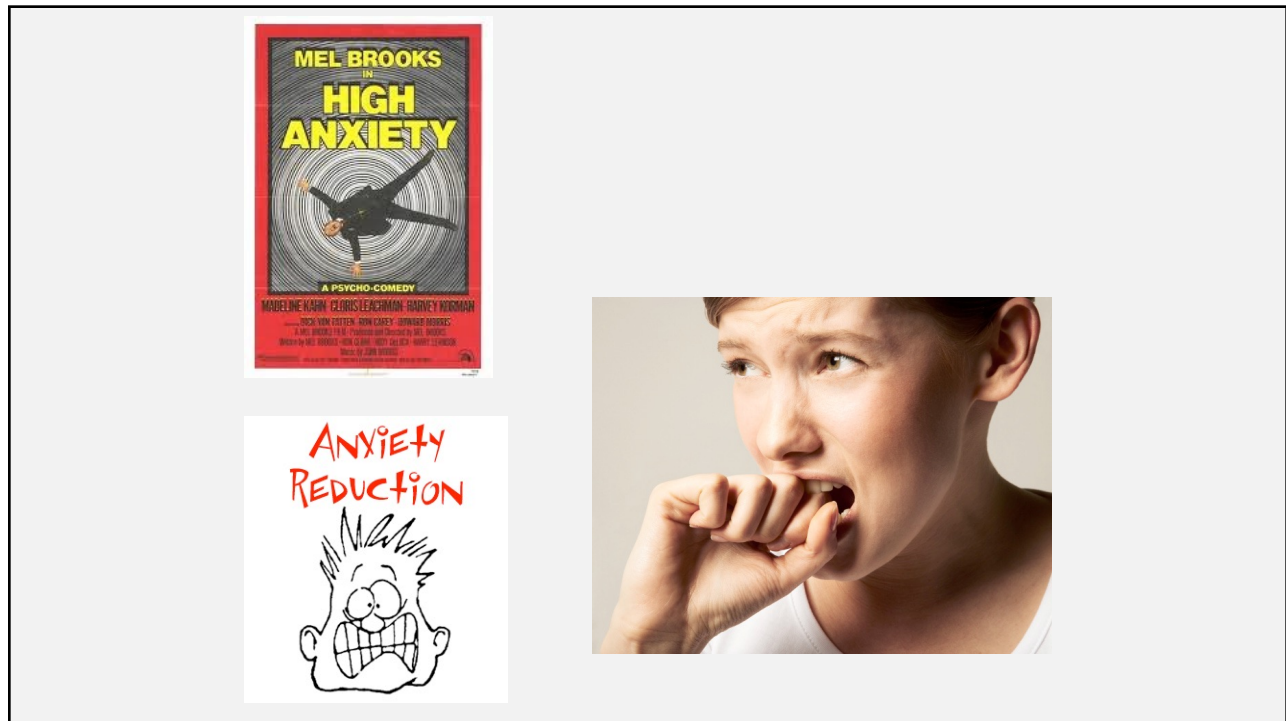
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23



24



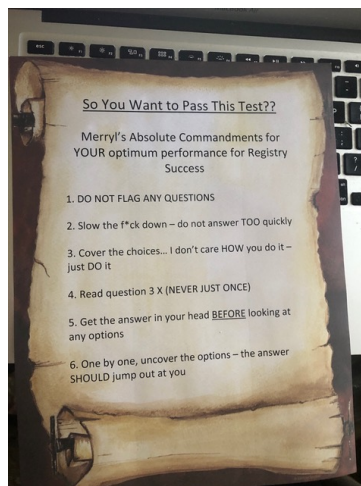
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CONTENT SPECIFICATIONS

ARRT® BOARD APPROVED: JANUARY 2016
IMPLEMENTATION DATE: JANUARY 2017

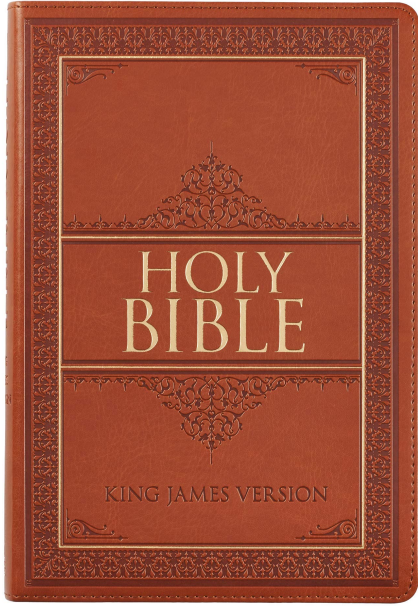
Radiography Examination

The purpose of *The American Registry of Radiologic Technologists® (ARRT®) Radiography Examination* is to assess the knowledge and cognitive skills underlying the intelligent performance of the tasks typically required of radiographers. Using a nationwide survey, the ARRT periodically conducts a practice analysis to develop a task inventory which delineates or lists the job responsibilities typically required of radiographers.¹ An advisory committee then determines the knowledge and cognitive skills needed to perform the tasks on the task inventory and these are organized into the content categories within this document. The document is used to develop the examination. The results of the most recent practice analysis have been applied to this document. Every content category can be linked to one or more activities on the task inventory. The complete task inventory is available at arrt.org.


The following table presents the four major content categories covered on the examination, and indicates the number of test questions in each category. The remaining pages list the specific topics addressed within each category, with the approximate number of test questions allocated to each topic appearing in parentheses.

This document is not intended to serve as a curriculum guide. Although ARRT programs for certification and registration and educational programs may have related purposes, their functions are clearly different. Educational programs are generally broader in scope and address the subject matter that is included in these content specifications, but do not limit themselves to only this content.

| Content Category | Number of Scored Questions ² |
|---|---|
| Patient Care | 33 |
| Patient Interactions and Management | |
| Safety | 53 |
| Radiation Physics and Radiobiology ³ | |
| Radiation Protection | |
| Image Production | 50 |



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EXAMINATION CONTENT SPECIFICATIONS

ARRT BOARD APPROVED: JANUARY 2021
IMPLEMENTATION DATE: JANUARY 1, 2022

Radiography

The purpose of the exam is to assess the knowledge and cognitive skills underlying the intelligent performance of the tasks typically required of the staff technologist at entry into the profession. The tasks typically performed were determined by administering a comprehensive practice analysis survey to a nationwide sample of radiographers.¹ An advisory committee then determined the knowledge and cognitive skills needed to perform the tasks on the task inventory and these are organized into the content categories within this document. Every content category can be linked to one or more tasks on the task inventory. The document is used to develop the examination. The *Task Inventory for Radiography* may be found on the ARRT's website (www.arrt.org).

The ARRT avoids content when there are multiple resources with conflicting perspectives. Educational programs accredited by a mechanism acceptable to ARRT offer education and experience beyond the minimum requirements specified in the content specifications and clinical competency requirements documents.

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EXAMINATION CONTENT SPECIFICATIONS

ARRT® BOARD APPROVED: ~~PENDING~~ JANUARY 2016
IMPLEMENTATION DATE: JANUARY 2017, 2022

Radiography-~~Examination~~

The purpose of ~~t~~The American Registry of Radiologic Technologists® (ARRT®) ~~R~~adiography ~~E~~xamination is to assess the knowledge and cognitive skills underlying the intelligent performance of the tasks typically required of radiographers ~~at entry into the profession. The~~ tasks typically performed were determined by administering a comprehensive practice analysis survey to a nationwide sample of radiographers.¹ Using a nationwide survey, the ARRT ~~periodically conducts a practice analysis to develop a task inventory which delineates or lists the~~ job responsibilities typically required of radiographers.¹ An advisory committee then determines the knowledge and cognitive skills needed to perform the tasks on the task inventory and these are organized into the content categories within this document. The document is used to develop the examination. The results of the most recent practice analysis have been applied to this document. Every content category can be linked to one or more activities on the task inventory. The complete ~~t~~The Task ~~i~~Inventory for Radiography is available ~~may be found on the~~ ARRT's website at (www.arrt.org).

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A. Ethical and Legal Aspects

1. ~~patient's~~ patients' rights
 - a. ~~informed~~-consent (*e.g., ~~written~~informed, oral, implied)
 - b. confidentiality (HIPAA)
 - c. American Hospital Association (AHA) Patient Care Partnership (~~Patient's~~ Patients' Bill of Rights)
 1. privacy
 2. extent of care (e.g., DNR)
 3. access to information
 4. living will, health care proxy, advanced directives
 5. research participation
2. legal issues
 - a. verification (e.g., patient identification, compare order to clinical indication)
 - b. common terminology (e.g., battery, negligence, malpractice, beneficence)
 - c. legal doctrines (e.g., respondeat superior, res ipsa loquitur)
 - d. restraints versus ~~immobilization~~positioning aids used to eliminate motion artifact

- b. ~~verify informed consent when necessary~~
- ~~eb.~~pre- and post-examination instructions (e.g., preparation, diet, medications and discharge instructions)
- ~~dc.~~respond to inquiries about other imaging modalities (e.g., ~~CT, MRI, mammography, sonography, nuclear medicine, bone densitometry~~ regarding dose differences, types of radiation, patient preps)

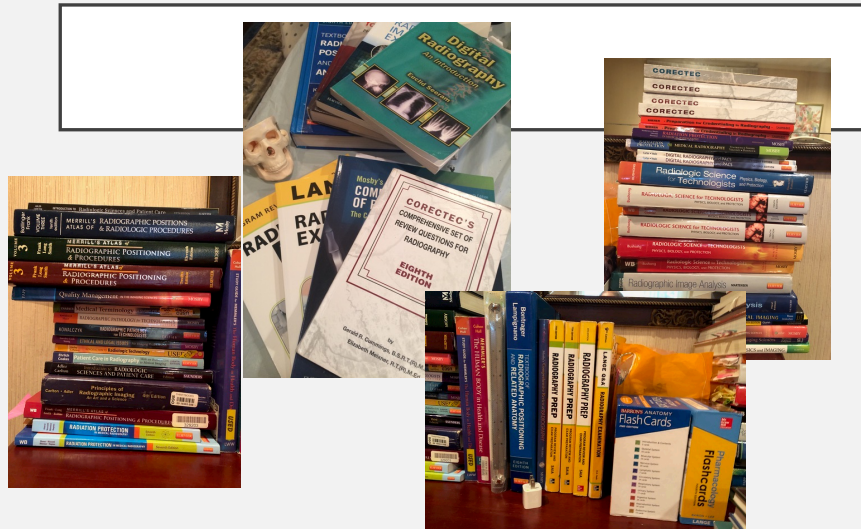
C. ~~Physical Assistance~~Ergonomics and Monitoring

1. ~~patient transfer and movement~~
 - a1. body mechanics (e.g., balance, alignment, movement)
 - a. ~~patient transfer techniques~~ergonomic devices (e.g., transfer board, Hoyer lift, gait belt)
 - b. ~~patient transfer techniques~~ergonomic devices (e.g., transfer board, Hoyer lift, gait belt)
2. assisting patients with medical equipment
 - a. infusion catheters and pumps
 - b. oxygen delivery systems
 - c. other (e.g., nasogastric tubes, urinary catheters, tracheostomy tubes)
3. ~~routine patient~~ monitoring and ~~documentation~~

32

| Content Category | Number of Scored Questions ² |
|--|---|
| Patient Care | 33 |
| <i>Patient Interactions and Management (33)</i> | |
| Safety | 50 53 |
| <i>Radiation Physics and Radiobiology³ (21) (22)</i> | |
| <i>Radiation Protection (29) (34)</i> | |
| Image Production | 51 50 |
| <i>Image Acquisition and Technical Evaluation (26) (24)</i> | |
| <i>Equipment Operation and Quality Assurance (25) (29)</i> | |

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Applications received by ARRT fewer than 30 days before the end of the three-year period will be returned. Candidates eligible for testing accommodations must submit a Request for Testing Accommodations form. Forms can be printed at www.art.org. Please see Certification and Registration handbook for instructions.

| SCORE REPORT | | |
|--|-----------|---------------------------|
| Radiography | | |
| Content | #Items | Section Scaled Score |
| Patient Care | | |
| Patient Interactions and Management | 33 | 8.3 |
| Safety | | |
| Radiation Physics and Radiobiology | 22 | 7.2 |
| Radiation Protection | 31 | 6.1 |
| Image Production | | |
| Image Acquisition and Technical Evaluation | 21 | 6.8 |
| Equipment Operation and Quality Assurance | 29 | 6.6 |
| Procedures | | |
| Head, Spine, and Pelvis Procedures | 18 | 7.8 |
| Thorax and Abdomen Procedures | 21 | 8.1 |
| Extremity Procedures | 25 | 8.1 |
| TOTAL TEST SCALED SCORE | 69 | PERFORMANCE STATUS |
| RE-EXAMINATION STATUS | Reapply | SEE BACK OF THIS FORM |

TEST SCALED SCORE 69 PERFORMANCE STATUS FAIL
RE-EXAMINATION STATUS Reapply SEE BACK OF THIS FORM

TEST SCALED SCORE 69 PERFORMANCE STATUS FAIL
RE-EXAMINATION STATUS Reapply SEE BACK OF THIS FORM

Applications received by ARRT fewer than 30 days before the end of the three-year period will be returned. Candidates eligible for testing accommodations must submit a Request for Testing Accommodations form. Forms can be printed at www.art.org. Please see Certification and Registration handbook for instructions.

| SCORE REPORT | | |
|--|-----------|---------------------------|
| Radiography | | |
| Content | #Items | Section Scaled Score |
| Patient Care | | |
| Patient Interactions and Management | 33 | 7.2 |
| Safety | | |
| Radiation Physics and Radiobiology | 22 | 7.5 |
| Radiation Protection | 31 | 6.2 |
| Image Production | | |
| Image Acquisition and Technical Evaluation | 21 | 6.7 |
| Equipment Operation and Quality Assurance | 29 | 6.5 |
| Procedures | | |
| Head, Spine, and Pelvis Procedures | 18 | 6.5 |
| Thorax and Abdomen Procedures | 21 | 6.3 |
| Extremity Procedures | 25 | 8.4 |
| TOTAL TEST SCALED SCORE | 69 | PERFORMANCE STATUS |
| RE-EXAMINATION STATUS | Reapply | SEE BACK OF THIS FORM |

TOTAL TEST SCALED SCORE 69 PERFORMANCE STATUS FAIL
RE-EXAMINATION STATUS Reapply SEE BACK OF THIS FORM

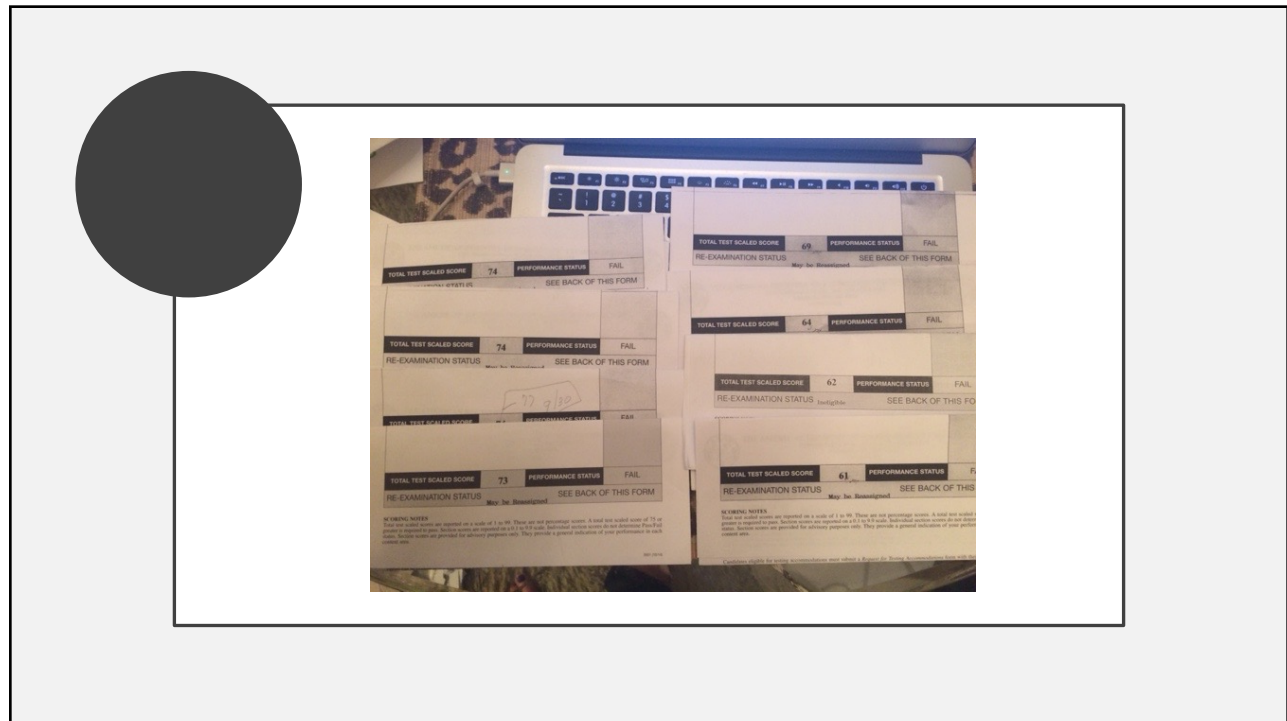
35

Applications received by ARRT fewer than 30 days before the end of the three-year period will be returned. Candidates eligible for testing accommodations must submit a Request for Testing Accommodations form. Forms can be printed at www.art.org. Please see Certification and Registration handbook for instructions.

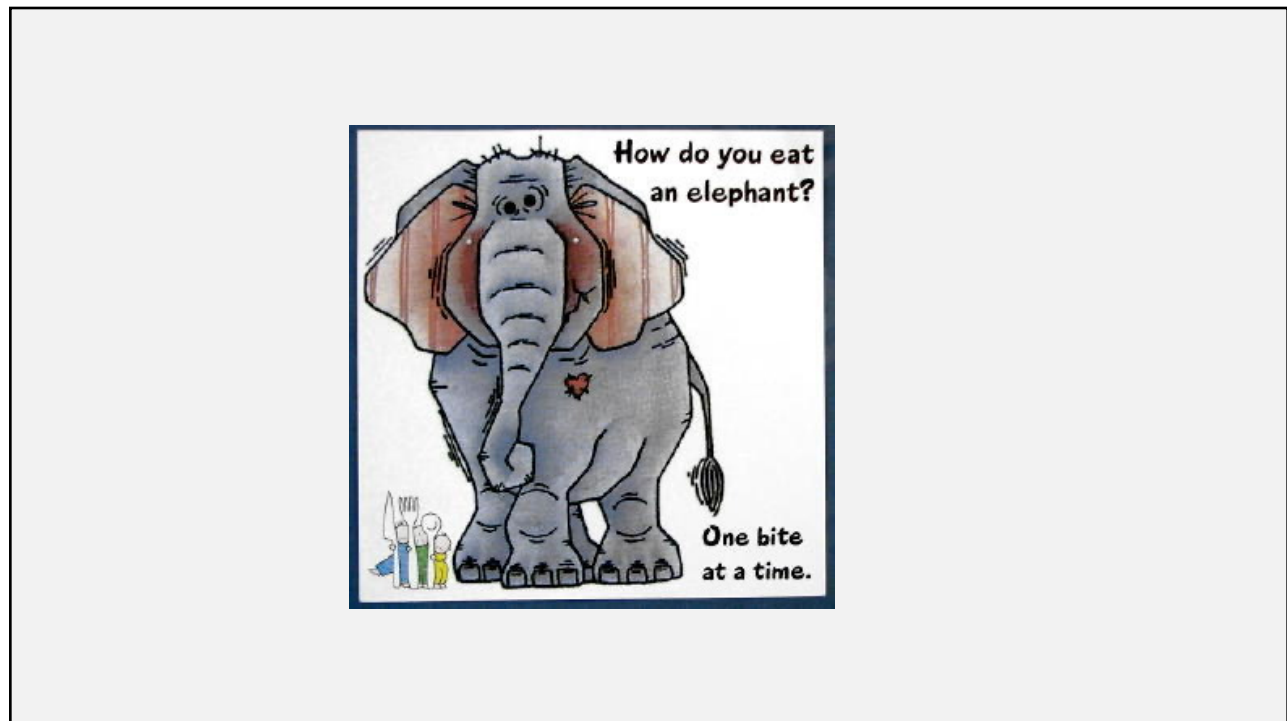
| ARRT SCORE REPORT | | |
|--|-------------------|---------------------------|
| Radiography | | |
| Content | #Items | Section Scaled Score |
| Patient Care | | |
| Patient Interactions and Management | 33 | 7.9 |
| Safety | | |
| Radiation Physics and Radiobiology | 22 | 6.8 |
| Radiation Protection | 31 | 6.7 |
| Image Production | | |
| Image Acquisition and Technical Evaluation | 21 | 6.3 |
| Equipment Operation and Quality Assurance | 29 | 7.1 |
| Procedures | | |
| Head, Spine, and Pelvis Procedures | 18 | 7.8 |
| Thorax and Abdomen Procedures | 21 | 8.1 |
| Extremity Procedures | 25 | 7.5 |
| TOTAL TEST SCALED SCORE | 73 | PERFORMANCE STATUS |
| RE-EXAMINATION STATUS | May be Reassigned | SEE BACK OF THIS FORM |

TOTAL TEST SCALED SCORE 73 PERFORMANCE STATUS FAIL
RE-EXAMINATION STATUS May be Reassigned SEE BACK OF THIS FORM

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37



38


MEMORIZING VS CONCEPTUAL UNDERSTANDING

KNOW THE DIFFERENCE

 www.oliveboard.in

39

Think like a
Proton



and stay
Positive

40

A SAMPLE OF PRIOR SUCCESSES

- Paige 72, 74 & 86 (3rd)
- Devon 72, 72, 91 (3rd)
- Jinal 56-77 (2nd)
- Genevieve 74-77
- Corey 73-83
- Christina 74-80
- Emily 67, 68, 75
- Aslin 62 – 83
- Pam 71, 71, 82
- Natalie 69, 79 (3rd)
- Melissa 82 (1st)
- Alexis 74-84 (3rd)
- Jennifer 74-77
- Megan 74, 73, 82
- Abby 71-86
- Jackie 72, 72, 92 (3rd)
- Miriam 72-79
- Jade 74 - 82

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ARRT SCORE REPORT

Radiography

| Section | Content | #Items | Section Scaled Score |
|---------|---|--------|----------------------|
| A | Radiation Protection | 45 | 7.1 |
| B | Equipment Operation and Quality Control | 22 | 3.8 |
| C | Image Acquisition and Evaluation | 45 | 4.3 |
| D | Imaging Procedures | 58 | 5.1 |
| E | Patient Care and Education | 30 | 7.3 |

| | | | |
|-------------------------|-----------|---|-------------|
| TOTAL TEST SCALED SCORE | 56 | PERFORMANCE STATUS | FAIL |
| RE-EXAMINATION STATUS | | May be Reassigned SEE BACK OF THIS FORM | |

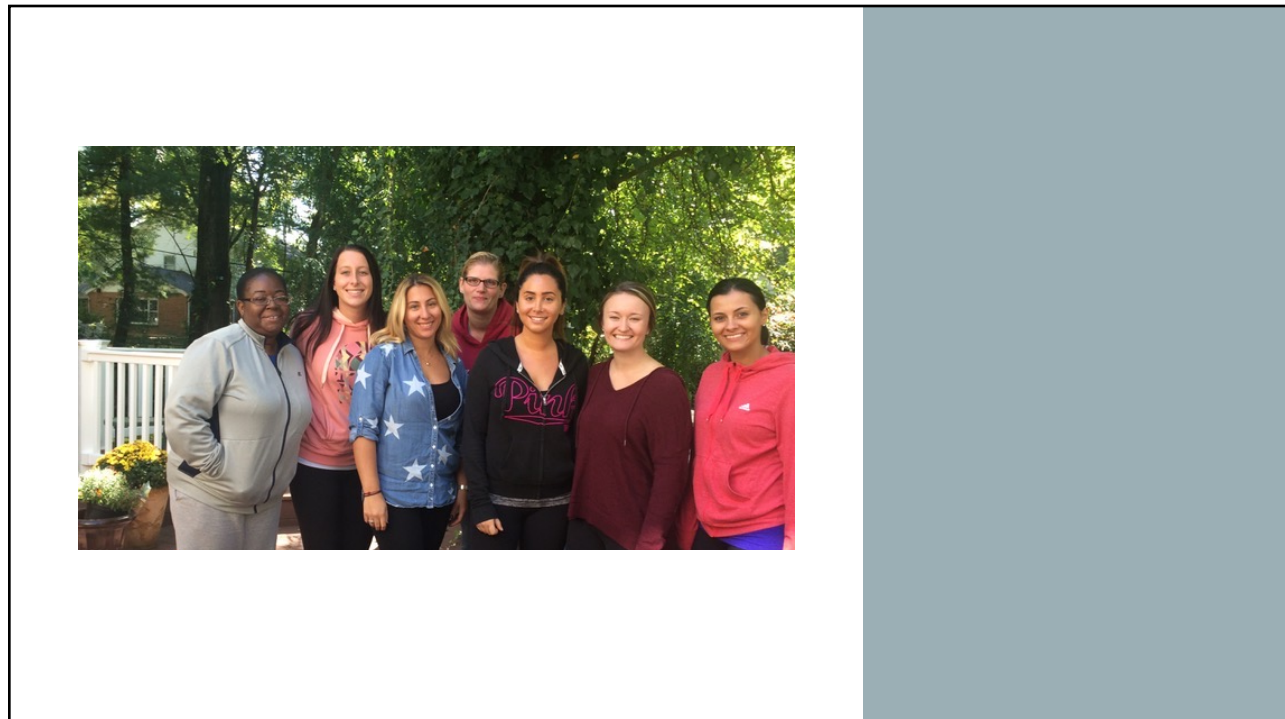
SCORING NOTES

42

| Radiography | | | |
|-------------------------|---|--------|----------------------|
| Section | Content | #Items | Section Scaled Score |
| A | Radiation Protection | 45 | 8.1 |
| B | Equipment Operation and Quality Control | 22 | 7.9 |
| C | Image Acquisition and Evaluation | 45 | 7.7 |
| D | Imaging Procedures | 58 | 8.6 |
| E | Patient Care and Education | 30 | 7.2 |
| TOTAL TEST SCALED SCORE | | 80 | PERFORMANCE STATUS |
| | | | PASS |

SCORING NOTES: Section scores are reported on a scale of 1 to 10. Pass/Fail status is not determined by individual scores. They provide a general indication of your performance in each content area. Total test scaled scores are reported on a scale of 1 to 99. These are not percentage points. A total test scaled score of 75 or greater is required to pass.

43



44

Zoom Video Communications

Software company

zoom.us

Zoom Video Communications, Inc. is an American communications technology company headquartered in San Jose, California. It provides videotelephony and online chat services through a cloud-based peer-to-peer software platform and is used for teleconferencing, telecommuting, distance education, and social relations. [Wikipedia](#)

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**** Topics for Sunday Session.docx

1. New Students _On Boarding_ Nov 8, 2020
2. Darn Chart Part 1_ Nov 15, 2020
3. Darn Chart Part 2_ Nov 22, 2020
4. New Students_Onboarding (Repeat)_ Dec 5, 2020
5. Upper GI (GB/GI/GU)- Fluoro_Nov 29, 2020
6. Lower GI_-Fluoro_Dec 6, 2020
7. Fluoroscopy - Equipment & Safety_Dec 20, 2020
8. Interactions_Dec 27, 2020
9. Headwork_Jan 3, 2021
10. What You Need to Know_January 10, 2021
11. More of What You Need to Know_Jan 17, 2021
12. Topics Not To Miss_January 24, 2021
13. Positioning & Procedures_Part 1_February 7, 2021
14. Positioning & Procedures, Part 2_ February 14, 2021
15. Contrast Media, AEC, Formulas & Haz Mat_Sun Feb 21, 2021
16. CR & DR Feb 28, 2021
16. CR & DR_Part 1_Feb 28, 2021
17. CR & DR_ Part 2_ March 7, 2021
18. Anatomy_March 14, 2021
19. Tips & Tricks_March 21, 2021
20. Registry Review
21. Biologic Aspects
22. 101 Tips for Passing the Registry
23. Registry Review 2
24. A Picture's Worth a Thousand Words
25. Registry Review
26. Merry's Essentials_October 17, 2021

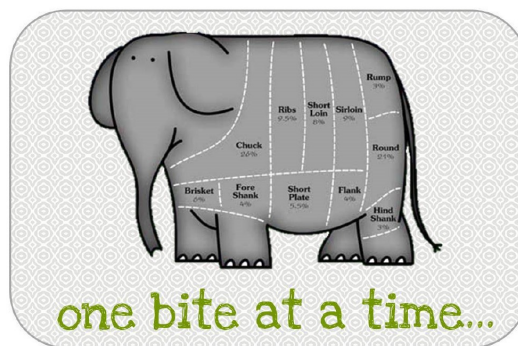
46



TIPS ON SUCCESS FOR PASSING THE REGISTRY

Merryl N. Fulmer, B.S. R.T.
(R)(M)(MR)(QM)(CT)

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How to Study for the Boards
Merryl N. Fulmer, B.S., R.T. (R)(M)(MR)(QM)(CT)

48

Which Bite of the Elephant (Topic)?

- | | |
|---|--|
| <input type="checkbox"/> 1. Ethics & Legal | <input type="checkbox"/> 12. Image Acquisition & Technical (4) |
| <input type="checkbox"/> 2. Interpersonal Communications | <input type="checkbox"/> 13. Imaging Equipment (5) |
| <input type="checkbox"/> 3. Physical Assistance & Monitoring | <input type="checkbox"/> 14. Image Processing & Display (4) |
| <input type="checkbox"/> 4. Medical Emergencies | <input type="checkbox"/> 15. Criteria for Image Evaluation (4) |
| <input type="checkbox"/> 5. Infection Control | <input type="checkbox"/> 16. Quality Control (5) |
| <input type="checkbox"/> 6. Handling & Disposal of Toxic Matter | <input type="checkbox"/> 17. Head |
| <input type="checkbox"/> 7. Pharmacology | <input type="checkbox"/> 18. Spine & Pelvis |
| <input type="checkbox"/> 8. Principles of Radiation Physics (3) | <input type="checkbox"/> 19. Thorax |
| <input type="checkbox"/> 9. Biological Aspects of Radiation (3) | <input type="checkbox"/> 20. Abdomen, GI & GU |
| <input type="checkbox"/> 10. Minimizing Patient Exposure (3) | <input type="checkbox"/> 21. Upper Extremities |
| <input type="checkbox"/> 11. Personnel Protection (3) | <input type="checkbox"/> 22. Lower Extremities |
| | <input type="checkbox"/> 23. Other |

49

Topic _____ Date _____

- ☐ Rad Review Easy _____
☐ Lange Q & A _____
☐ Lange Flash Cards _____
☐ Lange Prep Book _____
☐ Mosby _____
☐ Kettering _____
☐ Corectec _____
☐ Rad Tech Boot Camp _____
☐ X-ray Coach _____
☐ Book(s) and other materials _____
☐ For each topic make a copy of this page!!!!

Notes


50

40 Hour Initial Training Fall 2021
MRI & Computed Tomography
Saturday mornings 9:00 am - 12:00 pm
October 2 - Dec 11, 2021
 John Posh, R.T. (R)(MR)
 Renee L. Graves, R.T. (R)(CT)
 All courses are approved by the ASRT for 40 CE credits
 Contact Merryll N. Fulmer, B.S. R.T. (R)(M)(MR)(QM)(CT) for more information &
 registration. www.merryllfulmer.com



51

Initial Training in Mammography



Fall 2021
Our 20th Year!

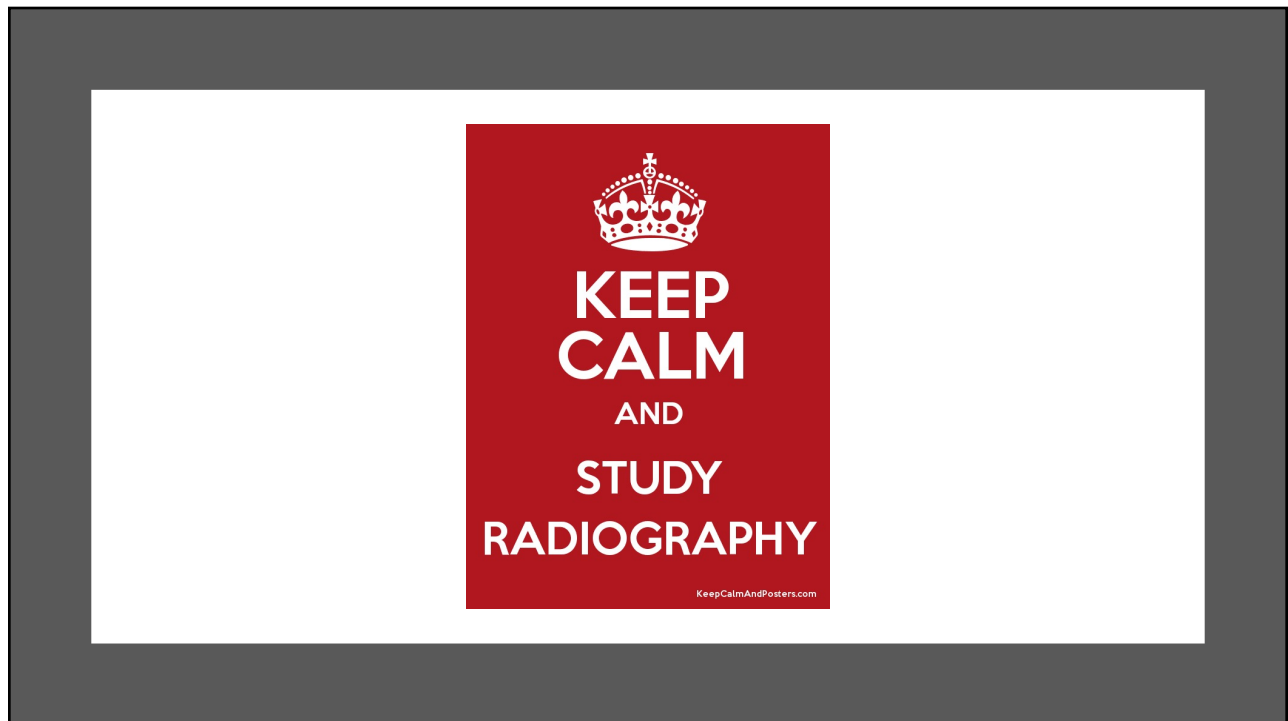
Merryll N. Fulmer, B.S., R.T. (R)(M)(MR)(QM)(CT)

****Approved by the ASRT for 48 CE credits****

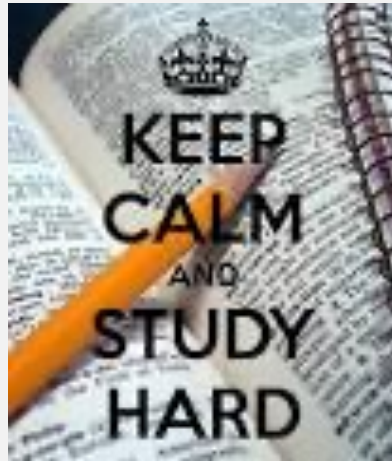
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53



54



55



56

MY PROFESSIONAL FEE

- \$30.00 per hr
- Recommend min of 2 hrs
- Recommend at least 1-2 sessions/week
- Can doing mornings and some evenings by request
- Can do weekends
- Simply contact me to schedule and discuss your individual situation
- Merry! N. Fulmer
- mnfulmer@aol.com
- www.merryfulmer.com
- I'm here for you!!!!

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58

Merryl N. Fulmer, B.S., R.T.

(R)(M)(MR)(QM)(CT)

**Diagnostic Imaging
Specialist**

ARRT Registry Preparation

1166 Mettler Road
Huntingdon Valley, PA 19006-2715

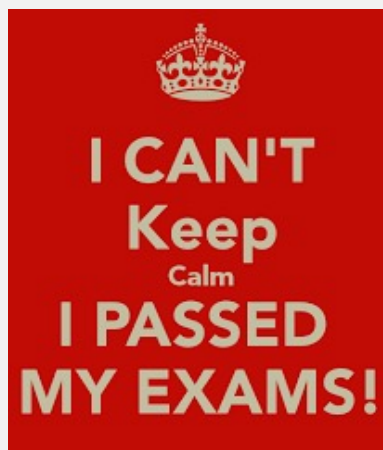
215-947-7559 215-219-1110
mnfulmer@adl.com



Body

TO REACH ME...
WWW.MERRYLFULMER.COM

59



60