



ADVANCED RADIATION PHYSICS INC

We make it happen!

2888 NW 30th Street
Boca Raton, FL 33434
Telephone: 561-789-6642
Webpage: www.thearpi.com

Part 2 Review Course Outline

Course fee:

- \$1600
- A non-refundable fee of \$600 is required
- Students who took Part 1 with us will pay only \$1200 for this one and only \$800 for the oral class
- Students who only took Part 2 with us you'll pay only \$1200 for the oral class
- Retake the course for free if you don't pass.
- \$200 discount per course for Veterans and Military personnel.
- \$200 discount per person for a group of 4 or more.
- \$100 referral bonus to a review course or \$50 referral bonus to a mock exam for each student recommended.
- Remaining balance due two weeks before the class starts.
- Use PayPal or send check to:
 - Advanced Radiation Physics Inc.
 - 2888 NW 30th Street
 - Boca Raton, FL 33434
- Send registration form by email to registration@thearpi.com

Course fee will include:

- Two days course review: 9:30 AM to 5:30 PM
- Electronic file with the course material
- Continuous attendance to the classes online until pass the exam review of exam like questions in the last half of the second day

- Study group organized from the first day of the course, with proposed structured schedule and mock tests monitored by an ARPI professor active up to the exam date.

Course location:

- Offered online only
- Webinars are recorded and you can have them and listen as many times as you wish.
- Chat, recordings, and documents will be shared by all the attendants from the first class of the year till the last one of the same year.

1. Reference and Relative Dosimetry

- a. Absolute calibration for photon and electron beams
- b. Dosimeter design, characteristics, application and QA, including ion chambers, solid state, optical, chemical, film and arrays.
- c. Survey detector design and application

2. Treatment machines

- a. Photon/Electron Medical Accelerators, physics, design, beam characteristics, delivery hardware, QA and shielding.
- b. Proton accelerators and beam characteristics
- c. Specialized machines, e.g., design and function of non-conventional or site-specific external beam delivery systems.

3. Therapy imaging and room design, patient safety, data transfer and professionalism and ethics.

- a. Imaging for Therapy Simulation (including physics, equipment design, application, and image reconstruction)
- b. Shielding and radiation safety
- c. Treatment localization and verification imaging, image registration
- d. Quality control and error prevention
- e. Computing and IT
- f. Professionalism and IT

4. Treatment planning for photons, electrons, SRS, SBRT, inter-and intra-fractionation variations, planning system safety
 - a. Photon Treatment Planning
 - b. Treatment Planning Electrons
 - c. Management of inter- and intra-fraction variations
 - d. Tx planning system safety and QA
5. Brachytherapy, radiation protection, radiation biology
 - a. Brachytherapy isotopes, delivery systems, planning, QA and shielding
 - b. Radiation protection regulations, personnel monitoring and special conditions (pregnancy, implanted devices, etc.)
 - c. Radiation biology
6. Mock test

Silvia Pella, PhD, DABR

President & CEO of Advanced Radiation Physics Inc.

Affiliate Research Professor, Florida Atlantic University