0730-0800  Administrative Processing
Sign-in, Receive Handouts and Turning Point Remotes

0800-0820  Introduction
Introduction of the Mobile Training Team, AFRRI’s radiological program and a brief overview of the MEIR course.

0820-0900  Global Radiological and Nuclear Threats to U.S. Security
Discussion of the current status of global radiological and nuclear threats to the U.S.

0900-0910  Break

0910-1000  Physical Principles of Ionizing Radiation
Delve into the process by which radiation interacts with matter.

1000-1010  Break

0110-1100  Health Physics Equations
Instructor led practice performing fundamental calculations relating to radiation protection.

1100-1200  Lunch

1200-1250  Biological Principles of Ionizing Radiation
Analyze the process by which radiation affects biological systems.

1250-1300  Break

1300-1350  Acute Radiation Syndrome
Discuss the effects of an acute, high dose radiation exposure to the whole body.

1350-1400  Break

1400-1450  Radiological/Nuclear Weapons and Effects
Detailed discussion of radiological/nuclear weapons and their effects when employed on a population.

1450-1520  Radiation Dosimetry
Review the methods and instrumentation used to determine the radiation dose a person has received.

1520-1530  Break  10

1530-1615  Radiation Squares Game (Part 1)
Team trivia competition that covers the first day’s lectures

TURN IN REMOTES
Medical Effects of Ionizing Radiation Course  
Armed Forces Radiobiology Research Institute  

FY17 Day 2

0745-0800  Review, Sign-in and Turning Point Remote Issue

0800-0900  Medical Management of Radiation Injury
Explanation of ARS phases, diagnostics, and confounders for persons exposed to radiation.

0900-0910  Break

0910-0940  Radiological Exposure Assessment Tools
Demonstration of the FRAT and BAT programs.

0940-0950  Break

0950-1050  Late Effects of Ionizing Radiation
The delayed health effects from long-term, low-level, and chronic high-dose sub-lethal exposures of ionizing radiation.

1050-1200  Lunch

1200-1300  Operational Management of Radiation Incidents
Current regulations, actions and recommendations for public health protection and operational planning. Contamination/decontamination demonstration.

1300-1310  Break

1310-1400  Introduction to RADIAC Equipment
RADIAC operation and hands-on practice.

1400-1410  Break

1410-1500  Management of Internal Contamination
Discuss the pathophysiology of internal radionuclide contamination and identify assessment methods and treatments of internal contamination for specific radionuclides.

1500-1545  Radiation Squares Game (Part 2)
Team trivia competition that covers the second day’s lectures.

1545-1630  Team Table-Top Scenarios
Propose solutions to real-world scenarios and utilize the information to give advice on radiological triage and protection.

TURN IN REMOTES
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FY17 Day 3

0745-0800  Review, Sign-in and Turning Point Remote Issue
0800-0900  Radiation Accident Experiences Part 1
Discussion of historical incidences where people have been exposed to acute or chronic radiation.
0900-0910  Break
0910-1010  Radiation Accident Experiences Part 2
Discussion of historical incidences where people have been exposed to acute or chronic radiation.
1010-1020  Break
1020-1100  Psychological Factors of Incident Response
Psychological reactions of populations who are exposed to the effects of a nuclear detonation, and both real and perceived widespread radionuclide contamination.
1100-1130  Final Exam (Multiple Choice)
1130-1230  Lunch
1230-1250  Film and Open Discussion
CDC “Radiological Terrorism” Clinician’s Training Film (http://www.bt.cdc.gov/radiation/justintime.asp)
1250-1320  Radiation Incident Response
Identify which agencies would respond to a “worst-case” radiological incident and what the response structure would look like.
1320-1330  Break
1330-1430  Table-Top Scenario Presentations
Groups present their solutions to the scenarios and utilize the information to give advice on radiological triage and protection.
1430-1500  Closing Comments & Test Review
Medical Effects of Ionizing Radiation Course
Armed Forces Radiobiology Research Institute

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