## Preliminary Schedule for Summer 2012 Semester

**NE 7313: Nuclear Science & Engineering for Secondary Science Teachers**

**Monday, June 4**
- **8:00 AM**: Course Registration, & Teaching Unit Review
- **9:00**: Introduction to Radiation Science
- **9:30**: Video: “Radiation Naturally”
- **10:00**: Break
- **10:45**: Radioactive Emissions & Types of Decay

**Tuesday, June 5**
- **8:00 AM**: Lab Discussions
- **9:00**: LAB I: GM tube Plateaus
- **9:30**: LAB II: Background Measurement
- **10:00**: Break
- **10:45**: Radioactive Emissions & Types of Decay – Continued

**Wednesday, June 6**
- **8:00 AM**: Radiation Protection
- **9:00**: Population / Math video
- **9:30**: Fusion Science and Engineering; Advanced Nuclear Plant R&D
- **10:00**: Break
- **10:45**: Laboratory: Radiation Half-Life

**Thursday, June 7**
- **8:00 AM**: (Transit to Callaway)
- **9:00**: Reactor Fundamentals
- **9:30**: Characters of Callaway Plant
- **10:00**: Break
- **10:45**: Environmental Monitoring Systems

**Friday, June 8**
- **8:00 AM**: Waste Disposal Systems
- **9:00**: Laboratory: Radiation Half-Life
- **9:30**: Introduction to MURR
- **10:00**: Break
- **10:45**: 11:00 a.m. Emergency Preparedness

**Monday, June 4**
- **12:00 PM**: Lunch
- **1:00**: Radioactive Emissions & Types of Decay – Continued
- **2:00**: Rates of Decay
- **3:00**: LAB VI: Gamma-Ray Shielding
- **3:30**: Fund. of Radiation Detection Systems

**Tuesday, June 5**
- **12:00 PM**: Lunch
- **1:00**: Radiation Counting Statistics
- **2:00**: Interaction of Radiation with Matter
- **3:00**: LAB IV: Statistics

**Wednesday, June 6**
- **12:00 PM**: Lunch
- **1:00**: Cold Fusion (Duncan)
- **2:00**: Radioisotopes in Biomedical Research (Hoffman)
- **3:00**: LAB V: Inverse Square

**Thursday, June 7**
- **12:00 PM**: Lunch
- **1:00**: Tour of MU Research Reactor
- **2:00**: Course Evaluation / Q&A on Teaching Units / Other Closing Items

**Friday, June 8**
- **12:00 PM**: Callaway Plant Tour
- **1:00**: Course Evaluation / Q&A on Teaching Units / Other Closing Items
- **2:00**: MURR Lab tours: - NAA of Materials & Nutritional Analysis
- **3:00**: Class Adjourns
- **3:30**: Lab: Reactor Simulator

**Monday, June 4**
- **6:30**: Fundamentals, continued
- **6:30 p.m.**: Anti-C Dressout Demonstration
- **6:00 p.m. Last Evening Picnic w/ Nuclear professionals (career issue, ,education, etc)**

**Tuesday, June 5**
- **6:30**: LAB VII: Beta Attenuation & Thickness Gauging (Miller)
- **4:00 Tour**: Ellis Nuclear Medicine Clinics (Kennedy)

**Wednesday, June 6**
- **6:30**: LAB VI: Gamma-Ray Shielding

**Thursday, June 7**
- **6:30**: 6:00 p.m. Last Evening Picnic w/ Nuclear professionals (career issue, ,education, etc)

**Friday, June 8**
- **6:30**: 6:00 p.m. Last Evening Picnic w/ Nuclear professionals (career issue, ,education, etc)