

**PHYSICS 249**  
**NUCLEAR AND PARTICLE PHYSICS**  
**(3.0; 3 credits)**

**Textbook:** Introduction to Nuclear and Particle Physics  
By: A. Das and T. Ferbel  
John Wiley & Sons (1994)

**Contents:**

1. Elementary scattering theory
2. Nuclear phenomenology
3. Nuclear models
4. Nuclear radiation, fission and fusion
5. Detectors and accelerators
6. Properties of elementary particles
7. Symmetries and transformations
8. The Standard Model and beyond

**N.B. Prerequisites: Phys. 218**

**Fall 2000**