

# Physics 152 / 252 – Introduction to Elementary Particle Physics

## General Information

course meeting: T Th 9:00 - 10:20 am, Hewlett Teaching Center 103

Professor: Michael E. Peskin  
SLAC, Building 48, room 221 926-3250  
Varian 326 (Tu Th mornings, or by appointment)  
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Course Assistant: Daniel Whalen  
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Textbook: M. Thomson, *Modern Particle Physics* (recommended)

Web page: <http://www.slac.stanford.edu/~mpeskin/Physics152/>

The course syllabus, lecture notes, problem sets and solutions, and links to the recommended reading will be posted on the course web page.

Brief course outline:

- Symmetries of nature; the quark model of hadrons
- Detection of elementary particles
- Current-current interaction and the parton model
- Quantum Chromodynamics
- Current-current interaction and the weak interactions
- W and Z bosons
- Weak interactions of heavy quarks, CP violation, neutrinos
- Higgs boson