

COUPLED HYDRAULIC-MECHANICAL BEHAVIOR

GeoEE 500

- 1. Applications**
- 2. Static Compaction**
 - 2.1. Basic relationships
 - 2.2. Stress-void ratio behavior
 - 2.2.1. Normally consolidated materials
 - 2.2.2. Over- and Under-consolidated materials
- 3. Background Materials**
 - 3.1. Equilibrium equations
 - 3.2. Solid constitutive laws
 - Hooke's law
 - Effective stresses
 - Pore pressure coefficients
 - 3.3. Darcy's law
- 4. Consolidation Behavior**
 - 4.1. Terzaghi (1923) Analysis
 - 4.2. Biot (1941) Analysis