STRENGTHS REVIEW 3

Hooke's Law
2D Stress - Strain, 2D Strain - Stress

Strain Energy Density

Volume Change

Plane Strain
- Deformations
- Strains on given elements and planes
- Principle strains
- Sketches

Pressure Vessels
- Hoop and axial stress
- Hoop and axial stress and principle stresses
- In plane stresses and strains

Torsion
- Shear and twist angle
- Nonuniform Torsion (Multiple torsions applied)
- In plane stresses and strains
- Power transmission
- Indeterminant torsion

Moment of Inertia
- Centroid – Neutral axis
- Transfer axis theorem

Shear and Moment equations

Shear and Moment Diagrams