Topics and Chapter Sections Covered for Test 3

Related homework: 8

1  Review
You should understand:

1. Reliability
2. Fatigue failure

2  Reliability: 6.14
You should know:

1. Different distributions
2. Reliability (Interference) Method

3  Fatigue: 7.7–7.15
You should know:

1. S-N diagrams, fatigue strength and endurance limit
2. Modified endurance limit
3. Fatigue stress concentration factors
4. Fatigue failure theories - especially Modified Goodman theory
5. Modified Goodman theory in shear
6. Modified Goodman theory for combined loading
7. How to choose whether Goodman or Yield criteria governs
8. How to design using Modified Goodman theory
9. Cumulative fatigue damage (Miner’s Rule)