Agenda

- Lecture
  - Risk

Software Project Risks

- Risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on the project objectives.
- Risk comes from uncertainty.

Risk Management

1. Identify the risk factors.
2. Determine the risk exposure/probability.
3. Develop strategies to mitigate risks.
4. Handle risks.

Risk Management

1. Identify the risk factors.

Top 10 Software Risks

1. Personnel shortfalls
2. Unrealistic time and cost estimates
3. Developing the wrong software functions
4. Developing the wrong user interface
5. Gold plating
6. Late changes to requirements
7. Shortfalls of external supplied components
8. Shortfalls of externally performed tasks
9. Real-time performance shortfalls
10. Straining science capabilities

Risk Management

1. Identify the risk factors.
2. Determine the risk exposure.
   - *Exposure = p x E*
   - p = probability
   - E = effect

Risk Management

1. Identify the risk factors.
2. Determine the risk exposure/probability.
3. Develop strategies to mitigate risks.
   - Do this for the N highest risks or with exposure greater than a threshold

   - Avoidance -take precautions
   - Transfer -consider other solutions
   - Acceptance -develop contingency plans

Risk Management

1. Identify the risk factors.
2. Determine the risk exposure/probability.
3. Develop strategies to mitigate risks.
4. Handle risks.
   - Monitor risk factors
   - Re-assess when occasionally