

**COURSE ANNOUNCEMENT****SPRING 2005****ENNEC 472**  
Schedule #470440

# **Quantitative Analysis In Earth Sciences**

**Tuesday & Thursday**  
**2:30-3:45 PM**  
**322 Sackett Building**

**What's the probability of getting struck by lightning, striking gold, or striking it rich in the stock market? How does the National Weather Service estimate the probability of rain tomorrow? How reliable are these forecasts? How does an oil company decide where to drill? This course is your opportunity to quantify uncertainty for decision making using statistical analysis.**

**The course provides a rigorous introduction to mathematical statistics with numerous examples from meteorology, climatology, geological sciences, and economics. You will learn how to:**

- **Summarize complex data sets**
- **Calculate probabilities**
- **Characterize data using probability distributions**
- **Statistically test scientific hypotheses**
- **Perform regression analysis**
- **Develop simple forecasting models**

**For further information contact Professor Tim Considine, Department of Energy & Geo-Environmental Engineering, 125 Hosler Building (863-0810), [cpw@psu.edu](mailto:cpw@psu.edu).**