



*The* UNIVERSITY of NORTH CAROLINA  
*at* CHAPEL HILL

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# STOR 155 Introductory Statistics

## Lecture 10: Randomness and Probability Model



## Probability is everywhere in our life!

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- A question asked in January 2011: What is the **probability** for each possible scenario of “Duke vs. UNC” in this season (Men’s b-ball)? --- Show details on the board ...
- All possible outcomes (scenarios): equally likely or not equally likely?
- Revisit the above question now (February 22, 2011) and update your prediction with **conditional probabilities** --- more details on the board ...



## More on probabilities: decision making

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- You just graduated from a college, and got a good job in RTP. Should you buy a house now? If yes, where, and what kind of house to buy? If no, should you invest in stocks or simply put your savings in a bank account?
- Many factors, with possible scenarios and their associated probabilities (how to specify them?), affect your decisions: your pay raise, job security, changes in your family structure, housing market, stock market, pros and cons in each mortgage loan, etc.
- What would be the **expected benefit/loss** associated with each decision you may make?