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**Department of Statistics**

**Statistics 19** **Instructor: Nicolas Christou**

**Options basics**

An option is a contract between two investors:

- Issuer (or seller), holder of a short position. He sells the option.
- Holder (buyer), holder of a long position. He buys the option.

Types of options:

- Call option: Gives the holder the right to buy an asset by a certain date for a certain price with a fee. This fee it is the price of the option or premium.
- Put option: Gives the holder the right to sell an asset by a certain date for a certain price with a fee. This fee it is the price of the put or premium.
- The date specified it is called: the expiration date or maturity date. The price specified it is called the exercise price or the strike price.
- There are European options (can be exercised only on the expiration date) and American options (can be exercised at any time up to the expiration date).

Stock options mechanics:

1. Options are normally traded in units of 100 shares. The price of the option is on a per share basis. Therefore, if the price of an option is priced at \$0.50, the total premium for that option would be \$50 ($0.50 \times 100 =$ \$50.)
2. Stock options are on a January, February, or March cycle. Stocks are randomly assigned in one of these three cycles. For example, IBM is on a January cycle.
3. Stock options expired on the Saturday immediately following the third Friday of the expiration month.