1. Intro to Psych
   1. Experimental Research
      1. The impact of an independent variable on a dependent variable
      2. Control groups and random assignment are necessary for researching conclusions
      3. Positives
         1. Conclusions can be drawn about casual relationship
      4. Negative
         1. Ethical considerations, behavior constrained in the lab
   2. Ethics
      1. Informed consent
         1. Contract between you and researcher that describe the general nature of the experiment. You will know of any risk or inconvenience. It states that you are aware that participation is completely voluntary
      2. Review boards
         1. Institutional Review Board
            1. Oversight board that looks at each individual study and determines whether or not it can be conducted
      3. Confidentiality
         1. Your data will not leave the laboratory
      4. Debriefing
         1. This is where the researcher is supposed to come clean with you. They’re supposed to tell you the true purpose of the experiment.
      5. Deception,
         1. If they have to lie with you
      6. Possible harm
   3. Animals
      1. Effort is made to minimize pain
      2. Labs that use animals are subject to unannounced inspections by the USDA
2. Neuroscience
   1. Neurons
      1. Neurons send and receive information throughout the body in the form of electrochemical signals
      2. Soma (cell body)
         1. Stores neucleus
      3. Dendrites
         1. Responsible for picking up message and sending to cell body
      4. Axons
         1. Responsible for sending the messages away (outgoing)
            1. To another neuron, muscle, or gland
         2. At the end of each axon is branches called axon terminals
            1. Axon Terminals

This is where the neuro transmitters are stored

* + 1. Myelin Sheath
       1. Axons are insulted with white, fatty substance.
       2. Layer of fatty cells that is wrapped around the axon in order to insulate it
       3. It speeds up the movement of the electrical impulses
       4. Multiple sclerosis
          1. Multiple sclerosis destroys myelin sheath
  1. Neural Impulse
     1. Cell Membrane is a semipermeable boundary – ion concentration inside and outside the cell creates all-or-none action potential
        1. Semipermeable
           1. Some chemicals can pass through, some cannot
        2. When at rest the inside of the neuron has a negative charge, the outside has a positive charge.
        3. If the neuron is stimulated the membrane breaks apart. All of the positive ions that are outside the neuron rush inside the neuron. Then the neuron less negative. Once it reaches its threshold then the neuron will fire.
        4. Every neuron has its own threshold
           1. A very quick surge of electrical activity will surge down the axon. The neuron fires, this is called an action potential.
     2. Synaptic vesicles release neurotransmitters into synapse. Find receptor sites in a lock-and-key fashion
     3. Reuptake
        1. Read the book to understand it
  2. What happens if you have too much dopamine?
     1. You can take a medication to block receptor site
  3. What happens if you too little dopamine?
     1. You would need to take a medication that would block reuptake
     2. Essentially you’re boosting the activity of the neuro transmitters