Unit 1 Introduction

1A. Forensic Science is the study and application of science to legal matters.

1. “Forensic” comes from the Latin word  *forensis* which means forum (where there was judicial hearings).
2. Forensics science = criminalistics
3. Forensic scientists study different types of evidence recovered from crime scenes.
   1. Testify in court as an expert witness
      1. Presents data, evaluates evidence and renders an impartial opinion
   2. Performs scientific research and to train others.
4. The following are disciplines used in forensics
   1. Chemistry
   2. Biology
   3. Firearms
   4. Document examination
   5. Photography
   6. Toxicology – study of poisons
   7. Fingerprints
   8. Polygraphy – the study of lie detection
   9. Pathology – study of unexplained/unusual death
   10. Anthropology – study of human kind
   11. Psychiatry – study of mental disorders
   12. Odontology – study of teeth and dental records
   13. Engineering
   14. Computer technology
   15. Geology – study of the Earth’s structure
   16. Environmental science
   17. Entomology- study of insects
   18. Physics

1B. The Legal System

1. There are several different types f law in the U.S. criminal justice system.
2. Statutory Law – written law
   1. The law on the books.
   2. Made by congress.
   3. Based on the Constitution
3. Civil Law – deals with relationships between individuals
   1. Marriage, divorce, wills, property, contracts
   2. Assigns a blame
   3. Needs a “preponderance” of evidence to convict
   4. Punishable by fines (generally)
4. Criminal Law – deals with offenses against and individual that are deemed offensive to society
   1. State would bring charges against the accused.
   2. Misdemeanor – minor crimes like small thefts, minor assaults(threat of bodily harm)/battery (bodily harm), possession of small amounts of drugs.
   3. Felony- major crimes like murder, armed robbery, dealing drugs
   4. Needs to be deemed guilty beyond a reasonable doubt.
   5. Punishable by fines, incarceration, community service, life in prison and capital punishment
5. Equity Law - remedial or preventative
   1. Restraining orders or injunctions (orders to start doing something or to stop doing something)
6. Public Law – regulation and enforcement of rights
7. Administrative Law – I.R.S., social security administration, military

1C. The steps in pursuing justice.

1. Crime is committed
2. Crime discovered
3. Police investigate
4. Crime scene documented and searched for evidence
5. Information gathered and given to prosecutor
6. Arrest warrant is issued if there is enough evidence for probable cause. 5% of arrests are with warrents
7. Arrest, Maranda rights, fingerprinted, photographed
8. Preliminary hearing – bail, pleas for misdemeanor, trial worthy
9. Trial date
   1. 50% of those arrested are convicted
      1. 25% of those convicted go to jail
10. Observation – what a person perceives using his/her senses.
    1. Investigators must observe interpret and report clearly.
    2. To collect evidence without making judgements (until later)
    3. Perception – interpreting information received from the senses
       1. It is not always accurate
          * People
            1. Filter information
            2. Fill in gaps
            3. Apply previous knowledge
11. 2. Observation by witnesses
    1. Eyewitness – a person who has seen someone or something and can communicate the facts (info that can be verified).
    2. Emotional statis influences our ability to observe
    3. Other things that influence observational skills:
       1. Whether the person in alone or in a group
       2. The number of people or animals in the area
       3. What type of activity was occurring in the area
       4. How much activity was occurring
    4. Eyewitness accounts of a crime scene vary considerably from one another due to: stress, interest, prejudices, personal beliefs, motives, memories fade and concentration
    5. Eyewitnesses often give their opinions of what happened instead of the facts.
       1. Opinion – personal belief based on judgement rather than on direct knowledge
    6. Eyewitness testimony is very powerful and can sway a jury.
    7. Knowing the shortcomings of eyewitness testimony is necessary to ensure justice.
12. Police officers and investigators
    1. Are trained to have good observational skills
    2. Are trained to have good analytical skills
       1. Ability to identify a problem
       2. Isolate the component parts
       3. Organize information
       4. Establish criteria to evaluate
       5. Draw appropriate conclusions
    3. Are trained in deductive reasoning
       1. Deductive reasoning – deriving the consequences from the facts using a series of logical steps