01.00.00 **CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN**

01.01.00 **LIGHTING**

Functional Area: During this unit of instruction the student will obtain a basic understanding and overview of the use of lighting. Different types of lighting will be studied, together with which is best for specific applications. The appropriate positioning and type of activation will also be covered.

01.01.01 **Learning Objective(s):** The student will be able to articulate that lighting is the one of the most effective barriers available.

01.01.02 **Learning Objective(s):** The student will be able to define the difference between a physical barrier and a psychological barrier and articulate into which type of barrier lighting falls.

01.01.03 **Learning Objective(s):** The student will be able to discuss the importance of lighting to be functioning properly in order to be effective.

01.01.04 **Learning Objective(s):** The student will be able to articulate and demonstrate that the best application may not simply be more lighting, but a more effective use of the lighting already available.

01.01.05 **Learning Objective(s):** The student will be able to define the term watt.

01.01.06 **Learning Objective(s):** The student will be able to define the term lumen.

01.01.07 **Learning Objective(s):** The student will be able to define the term foot-candle.

01.01.08 **Learning Objective(s):** The student will be able to define the term kilowatt.

01.01.09 **Learning Objective(s):** The student will be able to articulate the amount of foot-candles that is normally provided under certain naturally occurring situations, such as starlight, moonlight, daylight and direct sun.

01.01.10 **Learning Objective(s):** The student will be able to state the recommended amount of foot-candles for specific applications, such as residential and commercial sidewalks, parking garages, building entrances and pedestrian tunnels, among others.

01.01.11 **Learning Objective(s):** The student will be able to be able to calculate the cost that is will take to operate an appliance when the wattage of the appliance is known and the cost per kilowatt hour is given.

01.01.12 **Learning Objective(s):** The student will be able to recite certain characteristics of incandescent bulbs.

01.01.13 **Learning Objective(s):** The student will be able to articulate that the initial cost and operation of compact fluorescent bulbs will be significantly less than the initial cost and operation of incandescent bulbs, over the life of the bulbs.

01.01.14 **Learning Objective(s):** The student will be able to recite certain characteristics of fluorescent bulbs.

01.01.15 **Learning Objective(s):** The student will be able to list the three types of high intensity discharge bulbs currently on the market.

01.01.16 **Learning Objective(s):** The student will be able to recite certain characteristics of all high intensity discharge bulbs.

01.01.17 **Learning Objective(s):** The student will be able to list the characteristics specific to mercury vapor bulbs.

01.01.18 **Learning Objective(s):** The student will be able to state the basic color rendition of mercury vapor bulbs.

01.01.19 **Learning Objective(s):** The student will be able to state the general applications associated with mercury vapor bulbs.

01.01.20 **Learning Objective(s):** The student will be able to list the characteristics specific to metal halide lighting.

01.01.21 **Learning Objective(s):** The student will be able to state the basic color rendition of metal halide lighting.

01.01.22 **Learning Objective(s):** The student will be able to state the general applications associated with metal halide bulbs.

01.01.23 **Learning Objective(s):** The student will be able to state the general applications associated with high pressure sodium bulbs.

01.01.24 **Learning Objective(s):** The student will be able to list the characteristics specific to high pressure sodium bulbs.

01.01.25 **Learning Objective(s):** The student will be able to state the basic color rendition of high pressure sodium bulbs.

01.01.26 **Learning Objective(s):** The student will be able to list at least three reasons to buy high intensity discharge lighting.

01.01.27 **Learning Objective(s):** The student will be able to list at least three reasons not to buy high intensity discharge lighting.

01.01.28 **Learning Objective(s):** The student will be able to list the general characteristics of low pressure sodium bulbs.

01.01.29 **Learning Objective(s):** The student will be able to state the basic color rendition of low pressure sodium bulbs.

01.01.30 **Learning Objective(s):** The student will be able to state the general applications associated with low pressure sodium bulbs.

01.01.31 **Learning Objective(s):** The student will be able to list at least three types of controls for lighting and state the best application for each.

01.01.32 **Learning Objective(s):** The student will be able to .give examples of different types of motion activated light controls.

01.01.33 **Learning Objective(s):** The student will be able to list the three primary mounting methods for all types of light.

01.01.34 **Learning Objective(s):** The student will be able to describe which of the three types of mounting methods is associated with security lighting.

01.01.35 **Learning Objective(s):** The student will be able to list specific types of lighting heads generally associated with street lighting.

01.01.36 **Learning Objective(s):** The student will be able to articulate the fact that accent and sidewalk lighting is not the same as security lighting

01.01.37 **Learning Objective(s):** The student will be able to differentiate between accent lights and security lights.

01.01.38 **Learning Objective(s):** The student will be able to list several types of accent lighting fixtures.

01.01.39 **Learning Objective(s):** The student will be able to list the general characteristics of the new Everlast Induction lighting fixtures.

01.01.40 **Learning Objective(s):** The student will be able to state the general applications for the Everlast Induction lighting fixture

01.01.41 **Learning Objective(s):** The student will be able to recognize a motion detector type bulb.

01.01.42 **Learning Objective(s):** The student will be able to state the general uses for a motion detector bulb.

01.01.43 **Learning Objective(s):** The student will be able to be able to state the reasons why it is important to be specific with regard to lighting recommendations in security assessments.

01.01.44 **Learning Objective(s):** The student will be able to state the reasons why a customer should be given a minimum and maximum recommendation with regard to lighting.

COMPLETE