These are general notes designed to assist students who are regularly attending class and reading assigned material: they are supplemental rather than exhaustive and reflect general concepts.

I. Health Psychology
   A. Studies how psychological influences affect physical health and response to illness.
   B. In U.S.- leading causes of death have become chronic illnesses
      1. Cancer, heart disease influenced by psychological, lifestyle, and environmental factors
      2. Approximately 1/2 of all U.S. deaths are attributed to preventable lifestyle behaviors
   C. Tries to teach people how their behavior and decision making affects their health

II. Understanding Stress
   A. Stress - the process of adapting to changes (physical and psychological) demand of you
   B. Stressors - events an situations in which you must react
      1. Psychological - positive or negative life events, which you believe you must adjust
         a. Catastrophic Events - shocking and life - threatening
         b. Life Changes and Strains - especially negative (divorce, unemployment, illness)
         c. Chronic Stressors - experience over a long period of time (discrimination)
         d. Daily Hassles - minor irritations, pressures, and annoyances cumulatively
      2. Social Readjustment Rating Scale (SRRS) measures stressors according to the degree to which they require a change (good or bad) on one's life. LCU - Life Change Units - assigned to events such as divorce, death, pregnancy, losing a job, and getting married.
      3. Life Experiences Survey (LES) designed to ask subjects to rate their perception of stress.
   C. Stress Reactions - physical, psychological, and behavioral responses used to meet demands
      1. Physical Stress Responses - General Adaptation Syndrome (Hans Seyle)
         a. Alarm Stage - immediate, fight or flight response to mobilize body for action (increased heart rate, rapid breathing, sweating, digestion slows down, etc.)
         b. Resistance Stage - change of initial alarm subsides and a new wave of "adaptive energy" helps combat the stressor (endorphins & corticosteroids released)
         c. Exhaustion Stage - resources/biochemical are depleted. Physical wear and tear takes its toll, producing diseases of adaptation, such as heart disease, arthritis, and colds.
      2. Emotional Stress Responses - include fear, anger, irritability, and anxiety
      3. Cognitive Stress Responses - poor concentration, distorted thinking, and forgetfulness
         a. Ruminative Thinking - recurring intrusion of thoughts about stressful events
         b. Catastrophizing - overemphasizing possible negative consequences
         c. Increased tendency to rely on mental sets and functional fixedness
         d. Stress impairs effective decision - making
      4. Behavioral Stress Responses - changes in how people look, act, or talk - facial
expressions, perspiration, shaky voice, muscle spasms, jumpiness, disheveled appearance

5. **Burnout** (dysfunctional, apathetic, impulsive, and mistake - prone) & **Posttraumatic Stress Disorder/PSTD** (anxiety, irritability, poor concentration, sexual problems, flashbacks, paranoia, hypervigilence, psychomotor agitation, and blunted affect) linked to poor psychological adaptation to stressors

D. Mediating Factors - circumstances and personal characteristics that affect stress reactions

1. **Cognitive Appraisal** - events interpreted as stressful because you perceive self as lacking the resources to cope with the stressor effectively. Shapes the quality and intensity of response.

2. **Predictability** - knowing when to expect the stressor lessens the impact of the stressor

3. **Internal Locus of Control** lessens the impact of the stressor

4. **Social Support Network** - helps to manage the effects of stress. Helps people feel calm, optimistic, in control, and willing to try new coping methods (not alone)

5. **Personality** - influences response to stress
   a. **Hardiness** associated with positive response to stress
      * internal locus of control - "captain of my ship, master of my fate"
      * commitment - to family, work, and society
      * perceive change as an opportunity for growth and transformation
   b. **Disease Prone Personalities**
      * **type A** - time urgency, competitive, fast - paced, driven over - achiever.
      * **Cynical Hostility** (suspiciousness, resentment, frequent anger, antagonism, and distrust of others) crucial factor associated with heart disease.
      * **type C** - cancer prone personality - repressor (hold everything in)
      * **type E** - "everything to everyone" - variety of health complications
   c. **Dispositional Optimism** - especially strong stress - buffer

III. The Physiology and Psychology of Health and Illness

A. Stress, the Immune System, and Illness

1. **Psychoneuroimmunology** - studies how psychological and physiological processes interact in the body’s defense against disease

2. **White Blood Cells** (leukocytes) - make up the immune system and circulate individually throughout the body. These cells are formed in and released from the bone marrow. Recognize foreign cells and start an immune response.
   a. **B - Cells** produce antibodies, protein that can circulate widely and target foreign invaders, toxins, and other substances.
   b. **T - Cells** detect, bind to, and destroy entire cells.
   c. **Natural Killer (NK) Cells** destroy cells, especially important in destroying cancer.

3. Immune system directly affect by stress.
   a. More likely to develop infectious diseases & experience activation of a latent virus.
   b. Stress often suppresses immune system (NK cells are less active when people take exams, during periods of grief, and while readjusting after a divorce)
   c. Stress can accelerate the deterioration of HIV+/AIDS patient's immune system
   d. Expressing pent-up emotions & discussing stressors enhances immune functioning

"Confession Good for the Soul Study" - 3 groups of college students studied
   Group A - Wrote in a journal about stressors, feeling, and coping
   Group B - Wrote about trivial things (weather, attire, and TV shows.
   Group C - Did not write about anything
Results: Group A had fewer illnesses and higher white blood cell count

4. Risking your life: Health-Endangering behaviors
   a. Smoking is the single most preventable cause of death in the United States
      * Second - hand smoke suffer lung cancer and other respiratory diseases
   b. Alcohol Abuse - liver damage and irreversible brain damage (dementia)
   c. Unsafe/unprotected sex
   d. Poor nutrition
   e. Sleep disturbances
   f. Combination of any of these factors weakens the immune system

IV. Coping with Stress
   A. Developing a Plan of Action
      1. Identify the problem/stressor and the physical, behavioral, and psychological effects
      2. Identify possible strategies that can be used to address the problem(s) - BRAINSTORM
      3. Choose strategies
      4. Take action/implement plan
      5. Evaluate effectiveness
      6. Modify plan if necessary
   B. Coping Strategies
      1. Cognitive Coping Strategies - rethinking the problem
         a. Cognitive Restructuring - modify or change distorted thinking patterns and irrational beliefs
         b. Social Comparison - identify someone that is worse off than you
         c. Reappraisal - what is positive about present challenge
         d. Humor - identify absurd or lighter side of challenge. Laugh at yourself. Actually improves immune functioning and increases endorphin level
         e. Self-Efficacy - belief that you can master/cope with any challenge
      2. Emotional Focused Coping Strategies
         a. Ventilate feelings in a constructive way
            * Talk to a friend, counselor, minister
            * Write in a journal or write letters (do not mail)
            * Crying - tears are the river to your soul
            * Physical Exercise - running, punching a "bop" bag or pillow (do not hit a wall)
            * Screaming in a remote or private area
      b. Seek/create a social support system
      3. Behavioral Coping Strategies
         a. Time-Management
            * Keep a daily planner
            * Make a "to do" list for each day
            * Prioritize your responsibilities
            * Cross off responsibilities when accomplished (provides reinforcement)
            * Complete one task at a time
            * Make use of down-time (waiting for class to start, sitting in DR's office)
            * Delegate responsibility
            * Just say no! Recognize your limitations
            * Maintain organization
b. **Behavior Modification**
   * Target behavior (example: Study more often)
   * Identify plan and reinforcers for success and punishers for failure
     (Study Psychology 20 minutes 3 x a day 5 days a week)
     (Reinforcer/Punisher - Watch favorite TV show or go out with friend.)
   * Make a contract with self and support system (if needed)
   * Initiate the plan
   * Evaluate success and modify if necessary

c. **Physical Coping Strategies**
   * Exercise
   * Rest and appropriate nutrition
   * Progressive relaxation
   * Medication
   * **Biofeedback** - learn to control your autonomic responses
   * Prescription Medication of other coping strategies are not successful

****Problem-focused coping enhances self-esteem and self-efficacy****