



# MANGALORE UNIVERSITY

## DEPARTMENT OF BIOCHEMISTRY

### MSc BIOCHEMISTRY - III SEMESTER

#### SOFT CORE BCS 504: GENETICS

**Total number of lecture hours: 42**

**Total number of credits: 03**

#### Course objectives

1. To study the basic concept on health, hygiene and dimension of health
2. To study the communicable, non-communicable and lifestyle diseases and disorders
3. Drug abuse, oral hygiene, chain of infections and infection control

#### Course outcome

- The student understands the basic concept of health, hygiene and dimension of health.
- **Basics of communicable diseases such as STD**, no communicable diseases such as cancer and genetic as well as lifestyle disorders.
- Maintenance of proper mental and oral health, chain of infections.

#### Unit I

**4hrs.**

**Introduction:** WHO definition of health, Health and hygiene, General Health care, Factors affecting health, Indices and evaluation of health, Disease patterns in developed and developing world; Classification of diseases - Endemic, Epidemic, Pandemic; Professional Health hazards. **Disease condition:** Acute disease, Chronic disease, Incurable disease, Terminal disease, Illness, disorders, Syndrome, Pre-disease. **Treatment:** Psychotherapy, medications, surgery, medical devices, and self-care. **Dimensions of Health:** physical, mental, social, spiritual, emotional, vocational, political, cultural, socioeconomic, environmental, philosophical, educational, nutritive, curative and preventive.

#### Unit II

**14hrs.**

**Communicable diseases** - Tuberculosis, Cholera, Typhoid, Conjunctivitis. **Sexually transmitted diseases (STD)**, Information, statistics, and treatment guidelines for **STD**, **Prevention: Syphilis, Gonorrhea, AIDS etc.** **Non-communicable diseases**-Malnutrition-Undernutrition, Overnutrition, Nutritional deficiencies; Anemia, Stroke, Rheumatic heart disease, Coronary heart disease, Cancer, blindness, accidents, mental illness, Iodine deficiency, Fluorosis, Epilepsy, Asthma. **Genetic disorders**- Down's syndrome, Klinefelter's syndrome, Turner's syndrome. **Lifestyle disorders**- Obesity, Liver cirrhosis, Diabetes mellitus, Hypertension (Causative agents, symptoms, diagnosis, treatment, prognosis, prevention)

#### Unit III

**14 hrs.**

**Health promotion:** preventing drug abuse, Oral health promotion by tobacco control. **Mental Hygiene** and Mental Health.

- Concepts of mental hygiene and mental health Characteristics of mentally healthy person -

Warning signs of poor mental health - Promotive and preventive mental health – strategies and services - Ego defense mechanisms and implications - Personal and social adjustments - Guidance and Counseling. **Infection control** - Nature of infection - Chain of infection transmission - Defenses against infection transmission

#### **REFERENCES:**

1. Modern Nutrition in Health and Disease. 10th Edition by Maurice E.Shils, Moshe Shike, A Catharine Ross.
2. Krause's Food and Nutrition Therapy. 12th Edition by Janice L. Raymond, L. Kathleen Mahan, Sylvia Escott Stump.
3. Diagnostic Microbiology and Infectious Disease by Mark Holodniy (2016).
4. Health and Disease by Sarah Levet
5. Health and Disease by Adam Hook
6. Public Health and Private Wealth by Sarah Hodges & Mohan Rao

