In Partnership With Diversity Learning Institute-DLI & Twikatane e.V Vermany

Master's Degree Course: General Health Sciences, M.Sc. GHS
Course Duration: 12 months(1 year) 2 semesters(Total Credits = 60)

(A) **Modules Outline**

Module Name	Module Code	Teaching Hours	Credits
Semester 1 Modules			
Human Anatomy and Physiology	**GHS 601**	**30 hours**	**10**
- Structure and Function of Cells	-	10 hours	-
- Major Organ Systems	-	10 hours	-
- Homeostasis and Health	-	10 hours	-
Principles of Epidemiology	**GHS 603**	**30 hours**	**10**
- Introduction to Epidemiology	-	10 hours	-
- Study Designs in Epidemiology	-	10 hours	-
- Biostatistics in Health Sciences	-	10 hours	-
Public Health and Health Promotion	**GHS 605**	**30 hours**	**10**
- Concepts of Public Health	-	10 hours	-
- Health Promotion Strategies	-	10 hours	-
- Disease Prevention and Control	-	10 hours	-
Semester 2 Modules			
Medical Research Methods	**GHS 602**	**30 hours**	**10**
- Research Ethics and Integrity	-	10 hours	-
- Research Design and Methodology	-	10 hours	-
- Data Collection and Analysis	-	10 hours	-
Health Informatics and Technology	**GHS 604**	**30 hours**	**10**
- Electronic Health Records	-	10 hours	-
- Telemedicine and E-Health	-	10 hours	-
- Data Security and Privacy	-	10 hours	-
Global Health Issues	**GHS 606**	**30 hours**	**10**
- Emerging Infectious Diseases	-	10 hours	-
- Health Disparities and Inequities	-	10 hours	-
- Global Health Interventions	-	10 hours	-

(B) **How Artificial Intelligence (AI) Can Be Applied in This Course**

1. **Disease Prediction and Surveillance:**
    - Implementing AI algorithms for disease prediction, early detection, and surveillance based on health data analysis.
2. **Personalized Medicine:**
    - Utilizing AI in health informatics to analyze genetic and clinical data for personalized treatment plans and precision medicine.
3. **Clinical Decision Support Systems:**
    - Implementing AI-driven clinical decision support systems to aid healthcare professionals in diagnosing and treating patients.
4. **Health Data Analytics:**
    - Using AI for comprehensive health data analytics to identify patterns, trends, and insights for evidence-based decision-making in public health.
5. **Telehealth and Remote Monitoring:**
    - Integrating AI in telehealth platforms for remote patient monitoring, predictive analysis, and personalized healthcare delivery.
6. **Global Health Planning and Intervention:**
    - Leveraging AI for data-driven global health planning, resource allocation, and intervention strategies to address health disparities and inequities worldwide.

By incorporating AI into the General Health Sciences course, students can explore the transformative potential of advanced technologies in healthcare, public health, and global health initiatives.