

ADVANCED PRINCIPLES OF PUBLIC HEALTH
COURSE CODE: 5587
STUDENT PROFILE

STUDENT'S NAME:	TEACHER'S NAME:
School Year/Semester:	Grade:
Begin Date:	Date Completed:

Directions: Document student's progress using the applicable rating scales below: Enter date of completion under the appropriate column.

0 - Has not received instruction in this area / **no experience or knowledge of this task (N/A)**

1 – Can apply and perform **independently (80-100)**

2 – Can perform the task completely with **limited supervision (70-79)**

3 – Requires additional instruction and or **close supervision (60-69)**

I. INTRODUCTION TO EPIDEMIOLOGY		0	1	2	3
1	Describe and illustrate chain of infection.				
2	Differentiate modes of transmission (direct, indirect, vector, foodborne, airborne, waterborne, soil/arthropodborne).				
3	Identify patient zero.				
4	Calculate incubation periods.				
5	Identify sporadic, endemic, epidemic, pandemic.				
6	Distinguish notifiable diseases.				
7	Review of social determinants of health.				
II. THE IMMUNE RESPONSE		0	1	2	3
1	Define and recognize the immune system.				
2	Distinguish types of immune systems (innate vs. adaptive)				
3	Research and describe vaccines (different types, for example live attenuated genetically modified).				
4	Summarize herd immunity.				
III. EPIDEMIOLOGICAL APPROACH		0	1	2	3
1	Identify steps in an investigation (scientific method).				
2	Define and apply a case definition.				
3	Research agency responsibility.				
4	Describe methods of detection.				
5	Determine when to investigate (by severity, transmission, ongoing, etc.)				
6	Follow the Chain of infection.				
IV. CAUSATION AND RISK (MEASURING DISEASE AND DEATH)		0	1	2	3
1	Calculate incidence and prevalence.				
2	Distinguish and calculate risk ratio, odds ratio, rate ratio.				

3	Interpret and calculate morbidity and mortality rates.				
V. EPIDEMIOLOGICAL RESEARCH AND DESIGN					
1	Define & Recognize Study types (experimental or observational, descriptive or analytical).				
2	Define and Recognize Study design (cross-sectional, cohort case control, ecologic, randomized trials).				
3	Identify sampling strategies (double blind, placebo-experimental design, random sampling, quota sampling).				
4	Define screening, validity, reliability				
5	Recognize types of data (quantitative vs. qualitative).				
6	Identify ways to summarize data.				
7	Identify confounding variable.				
8	Analyze bias (selection bias, informational bias)				
VI. SURVEILLANCE, PREVENTION AND INTERVENTION		0	1	2	3
1	Define surveillance.				
2	Identify problems for surveillance. -Environmental exposures -Infectious diseases vs. chronic disease -Injuries -Accidents -Natural disasters -Agencies responsible (Agency Roles: CDC, DHEC, Red Cross, MRC)				
3	Define and discuss bioterrorism (FEMA 100 Certification).				
4	Analyze emotional, social, mental health (anxiety, depression, suicide).				
5	Explain dissemination of data.				
6	Identify ways to evaluate and improve surveillance systems.				
VII. INTRODUCTION TO GLOBAL HEALTH		0	1	2	3
1	Examine current issues in global health (pandemics, environmental factors, economic disparities, political factors, noncommunicable diseases, animal health, food sourcing and supply).				
2	Evaluate and apply case studies.				
3	Discuss governance and foreign policy.				
VIII. ETHICS		0	1	2	3
1	Evaluate Ethical Practices: -Privacy -Common good -Research coercion -Benefit vs risk -Informed consent -Vulnerable populations				

