Post-Graduate Module Alignment Meeting

11 May 2012

Objective

- To align modules that are common across different courses

Approach

- Review each course's common modules
- Assure timing is compatible to align
- Assure module content is compatible to align

E&AB Optional Modules

1. Qualitative research methodology
2. Planning analysis and writing up quantitative research

E&AB
proposed modules for alignment

- Communicable disease
  - MPH, EAB, Clinical Research
- non-communicable disease
  - MPH, EAB, Clinical Research
- Monitoring and evaluation
  - MPH, EAB
- Outbreak study combined with ethics & law
  - MPH, EAB, Clinical Research
- Linear & logistical regression
  - EAB, clinical research

- **EPB024: Epidemiology of communicable diseases**

- **Introduction**
- Epidemiology involves understanding the determinants and controlling diseases. This module focuses on infectious diseases, their agents, their impact and different suitable control strategies. This module focuses on the main communicable diseases that have the greatest impact in this area (HIV/AIDS, TB and Malaria). However students will be given an opportunity to study other emerging infectious diseases of interest during the self-study and assignment.

- **Description (Overall aim of the module):**
- Students will have a detailed understanding of the drivers of communicable diseases and understand the strengths and limitations of different control mechanisms.

- **Specific outcomes:**
- Students will have knowledge on communicable diseases with a focus on aspect of their magnitude and associated factors
- Students will be able to design effective CD control programmes
- Students will have an understanding on how to evaluate communicable disease control programme.

- **EPB025: Epidemiology of non-communicable diseases**

- **Introduction**
- Non-communicable diseases are increasingly affecting our populations. Any public health professional needs to have a detailed understanding of the different aspects involved in non-communicable disease control.

- **Description (Overall aim of the module):**
- To provide knowledge on non-communicable diseases specifically focusing on their magnitude and their associated factors.

- **Specific outcomes:**
- Students will have knowledge on non-communicable diseases with a focus on aspect of their magnitude and associated factors
- Students will be able to design effective NCD control programmes
- Students will have an understanding on how to evaluate non-communicable disease control programme.

- **EPB027: Outbreak study**

- **Introduction**
- The students will take part in a simulated outbreak investigation in which the student is the lead investigator, responsible for a variety of activities. The student will interview ‘patients’, talks with ‘health care personnel’, collects and analyses epidemiologic data, and ‘inspects sites’ that may be the source of the outbreak. Through the course of the investigation, the student will uncover important information and clues that ultimately lead to the source (and control) of the outbreak.

- **Description (Overall aim of the module):**
- Students will gain valuable hands on experience on the real aspects involved in dealing with a disease outbreak.

- **Specific outcomes:**
- Students will be able to respond to think quickly and develop appropriate responses when notified of an outbreak
- Students will design appropriate data collection tools
- Students will collect and analyse the data
- Students will interpret the data and use it to determine the source of the outbreak
- Students will design and put in place suitable control measures to prevent future outbreaks.

- **EPB028: Monitoring and evaluation**

- **Introduction**
- Monitoring is about systematically collecting information that can be used to evaluate and make judgements about the status of different health projects and programmes. In this module the students will learn about how to design and implement effective and accurate monitoring and evaluation systems that inform and improve public health programmes.

- **Description (Overall aim of the module):**
- Students will gain a detailed understanding of the different aspects of designing and implementing an effective monitoring and evaluation system.

- **Specific outcomes:**
- Students can develop and critique a monitoring system for a given health project
- Students can develop and critique an evaluation system for a given health project
- Students can make constructive remarks on different M and E systems presented to them
- Students can interpret the findings from an M and E system and make recommendations to inform and improve a given public health program.

- **EPB031: Linear regression**

- **Introduction**
- The students will already have received sessions on basic statistical techniques during the foundation course. This module will focus on modelling of quantitative data, and enabling students to use linear regression wisely. The focus will be on exploring the data, building regression models, and diagnostics to assess how well regression models fit the data.

- **Description (Overall aim of the module):**
- Students will be able to perform linear regression to analyse quantitative data appropriately.

- **Specific outcomes:**
- Describe the correlation between quantitative variables
- Describe the assumptions behind simple linear regression
- Explain the results of simple linear regression and how to interpret the results
- Describe the post-estimation techniques to assess the goodness of fit for regression models.

- **EPB032: Logistic regression**

- **Introduction**
- The students will already have received sessions on basic statistical techniques during the foundation course. This module will focus on modelling of binary data, and enabling students to use logistic regression wisely. The focus will be on exploring the data, building regression models, and diagnostics to assess how well regression models fit the data.

- **Description (Overall aim of the module):**
- Students will be able to perform logistic regression to analyse binary data appropriately.

- **Specific outcomes:**
- Define odds and odds ratios
- Define logistic regression and its use in the analysis of binary data
- Explain the logistic regression results and to interpret them
- Define confounding and interaction and the interpretation of results using logistic regression