



THE UNIVERSITY OF QUEENSLAND

Course title: PUBH7101 Infectious and Tropical Disease

Course coordinators: Dr Andrew Vallely and Dr Rushika Wijesinghe

Mode: Internal

Course introduction:

This course covers key infectious and tropical diseases affecting human populations with a focus on resource-poor countries in sub-Saharan Africa, Asia and the Pacific. The course will place these diseases within a broad burden of disease framework and will debate the role of poverty, gender, conflict and other factors that contribute to differential disease burden between and within communities. Case studies from the published literature will be used to illustrate key concepts and to facilitate debate.

The global distribution, disease burden, epidemiology, surveillance, life cycle, clinical manifestations, treatment and prevention of each disease will be described. For diseases that have vectors or intermediary hosts, factors affecting disease transmission, vector ecology and environmental control options will also be discussed.

The course includes visits to local laboratories for practical sessions on mosquito vector and snail intermediary host biology and a half-day field trip in the Brisbane area to see the ecology, breeding sites and environmental control of locally-important mosquito vectors.

Course aims:

This course will enable you to describe the geographical distribution, epidemiology, life cycle, clinical manifestations, treatment and prevention of key infectious and tropical diseases affecting human populations with a focus on resource-poor countries in sub-Saharan Africa, Asia and the Pacific. This course will also equip you with a foundation of knowledge and skills to enable you to participate effectively in the design and implementation of infectious and tropical disease control programmes in a variety of settings and to foster an appreciation of integrated approaches to disease control.

Course content:

Specific topics will include:

- Communicable disease control and approaches to prevention and control in countries at different levels of development
- Specific diseases including: Arboviruses such as dengue, Yellow fever, Rift Valley fever, West Nile virus, Chikungunya and others; Trypanosomiasis in African and the Americas; Lymphatic filariasis and onchocerciasis; Malaria (recent advances; malaria in pregnancy); Leishmaniasis; Schistosomiasis; Soil transmitted helminthiasis (hookworm, whipworm, roundworm, others); Typhus and the rickettsial diseases (spotted fevers, murine and scrub typhus, Q fever); Febrile illness in children, polio, influenza.
- Other topics to be covered through individual and group assignments include: plague, rabies, trachoma, hydatid disease, leprosy, viral haemorrhagic fevers and bioterrorism.

Method of assessment:

One individual written assignment; (60% in total); one group presentation (30%); attendance and tutorial participation (10%)

Recommended text:

Cook G, Zumla A eds. *Manson's Tropical Diseases*. Twenty-first Edition. London: Saunders, 2003.

Peters W, Pasvol G eds. *Atlas of Tropical Medicine and Parasitology*. Sixth Ed.. Philadelphia: Elsevier, 2007

Required resources:

Online Blackboard site: This provides an interactive environment for you and teachers. Reliable and regular access to the Internet is required.

Further details are provided in the [Course Profile](#):

http://www.uq.edu.au/study/course.html?course_code=PUBH7101