UGANDA CHRISTIAN UNIVERSITY

Bachelor of nursing curriculum

Microbiology II

Course Code: BNS 2201

Course Level: Year 2 semester II

Credit Units: 3 CU (45 CH)

**Brief course description**

This course focuses on the characteristic features of different parasites including their life cycles, taxonomy of the parasites; the role of zoonoses in the transmission of the disease

The geographical distribution of the human parasites: consequences of the parasites in terms of mortality or morbidity and the role of the vectors in the transmission of the parasites

Course objectives

Upon completion of the course the student should be able to:

* Describe the characteristic features of different human parasites
* Explain how each of the parasitic disease fits onto the parasite taxonomy
* Describe the role of zoonoses in the transmission of the disease
* Appreciate the geographical distribution of each of the human parasites
* Discuss the disease consequences in the terms of mortality or disablement
* Describe the role of the vectors in the transmission of the parasites

**Learning outcome**

Upon completion of this course, the students should prevent transmission and control of different human parasites and zoonoses in the community

***Detailed course content***

Introduction:

* Definition of the key terms and terminologies
* Host –parasite relation ship
* General feature characteristics of protozoa
* Metazoan, trematodes, Cystodes, Nematodes and arthropods

Life cycles, mode of transmission and control, host parasite relationships, signs and symptoms, diagnosis and treatment of parasites and parasitic conditions

* Amoebic dysentery ( Entamoeba histolytica)
* Giardiasis ( Giardia Lamblia)
* Trichmoniasis ( Trichomonas vaginalis)
* African sleeping sickness ( Trypanosoma rhodesience,Trypanasoma gambiense,Trypanasoma brucei)
* Chagas disease (Trypanasoma cruzi)
* Leishmaniasis (Leishmania donovani,Leishmania Mexican, Leishmania braziliensis)
* Malaria ( Plasmodium vivax,Plasmodium faliciparum,Plasmodium malariea )
* Opportunistic disease( Crptosporidium parvum,Toxoplasma gondii, Pneumocystis carinii,
* Schistosomiasis ( shcistosoma & intermediate hosts : Schistosoma haematobium, Shistosoma Mansoni,Biomphalaria galbrata,Schsitosoma Japonicum (bullinus)
* Oncomellina Neotricula, Roberstiella
* Liver fluke (Clonorchis sinensis)
* Tape worm infection ( Dipphyllobothrium latum)
* Sparganosis: Cystercerciasis, Taenia solium,Taenia saginata
* Hydatid disease ( Echinococcus granullosum, Echinococcus multilocularis
* Trichuriasis ( Trichuris trichura) Trichinosis ( Trichinella spirallis)
* Dracontiasis (Dracunculus medinensis)
* Hook worm ( Necator americanus, Ancylostoma duodenale)
* Ascaris (Ascaris lumbricoides)
* Pinworm (Enterobius vermicularis)
* Filariasis- Lymphatic( wuchereria bancrofti, Brugia malayi)
* Loiasis (Loaloa)
* Onchocerciasis ( Onchocerca volvulus)
* Anthropods:Crustaceans of parasitic importance

**Medical entomology** (Vectors)

**These include:**

* Hemipteran: bed bugs,reduvvi bug,Phthiraptera
* Biting lice, sucking lice, pubic lice,
* Diptera
* Flies, sand fly,black flies, Tsetesefly
* Mosquitoes
* Diptera larva/mysiasis: Magots Siphonaptera
* Rat flea (Xenolopsis cheopsy

**Mode of delivery**

* Lecture
* Laboratory demonstrations
* Case presentation
* Role play
* Demonstration

**Mode of assessment**

* Progressive assessment ……….. 50%
* Class presentations …………….. 10%
* Individual assigned topic ………….15%
* Mid semester exam………………….25%
* Final written exam:………………… 50%

**Total 100%**

**References**

Kee, Joyce LeFever. (2004). Handbook of laboratory and diagnostic tests with nursing implications. (6th ed) New Jersey Peason Prentice Hall

Nester, E. W., Anderson, D.G, Roberts, C.E.Jr, Peasall, N.N, & Nester, M.T., (2004). *Microbiology: A human perspective*. (4th ed.) New York: McGraw-Hill.

**Microbiology for Nurses**