**BBS 2111:Endocrine, reproductive and Urinary system**

**Course description:**

This course introduces students to the structure and functioning of the endocrine, reproductive and urinary systems.

The course will involve lectures, tutorials, and practicals.

**Course Objectives**

At the end of the course students should be able to:

1. Describe the structure and function of the endocrine, reproductive and urinary system
2. Explain the principles by which methods of detecting and estimation of hormonal levels in the body are based and how to interpret the findings.
3. Discuss the endocrine, reproductive and urinary disorders and their public health implications.

**Content line:**

Anatomy: Gross, embryology, Histology, Genetics of the endocrine, reproductive and urinary systems

Physiology: Classification and functions of the various hormones, their sources, transportation and targets, control of the reproductive and urinary system.

Formation and concentration of urine and the Homeokinetic functions of the kidney.

.Biochemistry: Clinical nature, Integrated Actions of hormones

Laboratory and practical sessions, Communication, control and integration of Hormonal action on Genito-Urinary system; Renin:- Angiotension – Aldosterone mechanism, Formation and concentration of urine and other excretions, Sexual differentiation, physical, psychosocial, biochemical changes associated with puberty, menstrual cycle and spermatogenic cycle, fertility, physiological infertility, contraception, pregnancy, parturition.

Biochemistry of gonadotrophins and gonadal hormones. Fertilization, antigenicity of spermatozoa, natural antisperm anti-Foetoplacental unit, maternal adaptation to pregnancy, labour and parturition, Lactogenesis, lactation. Phases of foetal growth and development.

**Investigative Procedures: eg**  plain radiography, urography, micturating cystogram, ultrasonography, hysterosalpingography; placentography, pelvic angiography, urinalysis.

Tests for kidney functional capacity, Hormonal levels and hormone stimulation tests.

**Requirements:**

**5weeks, 75 CH**

**Mode of assessment**

Progressive assessment 40%

Written summative examination 60%

**Course coordinator**

Dr. Lynette Tumwiine MBChB MMED (MUK)

**Reading materials**

1. [Medical embryology: human development, normal and abnormal](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=KEYWORD&function=INITREQ&SourceScreen=INITREQ&sessionid=2006101809571219106&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2000&scant1=Medical%20Embryology&scanu1=4&u1=2000&t1=@442515&pos=1&prevpos=1&)

2. [Textbook of medical physiology](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=KEYWORD&function=INITREQ&SourceScreen=INITREQ&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2000&scant1=Textbook%20of%20medical%20physiology%20%2f&scanu1=4&u1=2000&t1=@23812&pos=1&prevpos=1&), [Philadelphia: Saunders, 2000](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=INITREQ&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2009&u1=2009&t1=Philadelphia%20%3a%20Saunders,%20c2000.&pos=1&prevpos=1&beginsrch=1)

3. [Clinical anatomy for medical students/](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=NEXTPAGE&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=4&u1=4&t1=Clinical%20anatomy%20for%20medical%20students%2f&pos=1&prevpos=41&beginsrch=1)[Phildelphia: Lippincott Williams and Wilkins, 2000](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=NEXTPAGE&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2009&u1=2009&t1=Phildelphia%3a%20Lippincott%20Williams%20and%20Wilkins,%202000&pos=1&prevpos=41&beginsrch=1)

4. [Gross anatomy/](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=NEXTPAGE&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=4&u1=4&t1=Gross%20anatomy%2f&pos=1&prevpos=51&beginsrch=1)[Baltimore: Williams and Wilkins , 1995](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=NEXTPAGE&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2009&u1=2009&t1=Baltimore%20%3a%20Williams%20and%20Wilkins%20,%201995&pos=1&prevpos=51&beginsrch=1)

5. [Harper's biochemistry/](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=INITREQ&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=4&u1=4&t1=Harper%27s%20biochemistry%2f&pos=1&prevpos=1&beginsrch=1)[New York : McGraw-hill , 2000](http://81.199.17.5:8000/cgi-bin/gw_42_20a/chameleon?host=81.199.17.5%2b1111%2bDEFAULT&search=SCAN&function=INITREQ&SourceScreen=INITREQ&sessionid=2006101717302405175&skin=default&conf=.%2fchameleon.conf&lng=en&itemu1=2009&u1=2009&t1=New%20York%20%3a%20McGraw-hill%20,%202000.&pos=1&prevpos=1&beginsrch=1)