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**DIVISION MEDICAL PHYSIOLOGY;**  
**FACULTY OF HEALTH SCIENCES**  
**HONOURS IN MEDICAL PHYSIOLOGY**

**I. Course Contents:**

The HonsBSc (Medical Physiology) course is divided into two major modules: (1) **The Practical Module** which consists of your Laboratory Research Project and three laboratory rotations during the course of the year; and (2) **The Theoretical Module**, which consists of *capita selecta* lectures throughout the year, tutorials, and a literature review project (formerly known as “brain teaser projects”).

**II. Practical Module: Research Project and Lab Rotations**

**(a) Laboratory Research Project**

You will be allocated to a study supervisor in order to do the required research project in a specific laboratory. **Students will present their research project proposals 4 weeks after the commencement of the course** to the division in the form of a powerpoint presentation. The aim of these presentations will be to identify possible problem areas in the projects as early as possible, before work has progressed too far for rectification. Project supervisors will be present at this occasion. Projects will have to

reach a sufficient level of progress by **July** so that data can be presented at the Faculty's Annual Research Day and at the meeting of the Physiological Society of Southern Africa (PSSA), which usually takes place during September of each year. A further opportunity to present your completed research project will be in November where a panel of researchers, academics from our division and an external examiner will adjudicate. You will also be required to write up your research project in a mini-thesis format which will contribute to your final project mark.

### **(b) Laboratory Rotations**

This programme consists of demonstrations and do-it-yourself experiments during three laboratory rotations during the year: Reproductive Research Laboratory Rotation, Cardiovascular Research Laboratory Rotation and Flow Cytometry Unit rotation. A written report must be handed in after each laboratory rotation for evaluation.

**Note:** At the beginning of the course, all honours students will participate in a week-long general laboratory orientation workshop. Apart from the practical skills that you will acquire during these sessions, you will also gain thorough knowledge on laboratory safety, maintenance and standardization of measuring instruments, and the handling of electronic apparatus. You will be assessed on the knowledge and skills gained during this workshop by means of a test, which will count towards your Practical Module mark.

### **III. Theoretical Module: Lectures, Tutorials and Literature Review**

#### **(a) Lectures**

The theoretical programme consists of lectures that cover discussions on new developments and research directions in physiology. The lectures will not follow the typical textbook-style physiology, but should rather be seen as a collection of selected, interesting topics (“*capita selecta*”) presented by departmental and invited lecturers and researchers. ***You will be assessed on the lectures by the following means: (i) Closed book written test in June; (ii) open book written exam to be handed in by August; and (iii) closed book written exam in November.***

#### **(b) Tutorials**

The tutorials will aim at teaching the student on how to critically appraise original scientific articles, and how to develop an overall impression of a specific topic that is covered in different articles. Participation in the tutorials will be continually assessed and will contribute towards your year mark.

#### **(c) Literature Review Project**

This project requires you to prepare both a written mini-thesis and a powerpoint presentation on an interesting physiological topic. You will be allocated to a lecturer (“tutor”) together with whom you will decide on a topic. After you have made your choice, it will be your responsibility to research the topic in the library and from the Internet. The information must then be critically evaluated, from which your own conclusion or opinion must be drawn. There will be regular sessions with your tutor during which you can discuss your progress and problems. ***You will present your***

*Literature Review Project to the department in June and submit the mini-thesis to your tutor for evaluation by the beginning of November.*

#### **IV. ASSESSMENT AND MARK ALLOCATION:**

##### **Module 1 (50%):**

###### **(i) Year project:**

Mini-Thesis:	10%
Lab impression:	5%
Project presentation:	20%

**(ii) Lab Orientation Test and Lab Rotations:** 15%

##### **Module 2 (50%):**

###### **(i) Written Assessments:**

Closed Book Test:	10%
Open Book Exam:	10%
Closed Book Exam:	10%

**(ii) Tutorials:** 10%

###### **(iii) Literature Review:**

Mini-Thesis:	5%
Presentation:	5%

**GRAND TOTAL (Module 1+Module 2): 100%**

*NB: You have to achieve at least 50% in each Module in order to pass the course; furthermore, you need to achieve at least 50% in the written assessments (closed book test + open book exam + closed book exam), if not, you will undergo a re-examination in the form of an oral assessment.*

## **TELEPHONE NUMBERS AND E-MAIL ADDRESSES OF STAFF**

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