

PART 3

THE RESEARCH REPORT

Students apply what has been taught in the research techniques course, as well as the other units in the programme, and carry out a supervised research study on an approved topic. The report can be presented in Year 2, but it is usual for it to occur in Year 3. The process consists of submission of a protocol to the protocol committee and ethics committee. The research is then done under the supervision of an approved supervisor.

TEACHING BLOCKS

The units are taught in a block release form, each block consisting of five days spread throughout the year (usually February, April/ May, June and August). Students will be expected to write an essay each year which relates to the course information. They will also be expected to do a brief verbal report (with slides) to the class on the contents of the essay.

WEEK 1: February	WEEK 2: April	WEEK 3: June	WEEK 4: August
General Neuroanatomy ANAT7011A	General Neuroanatomy ANAT7011A	General Neuroanatomy ANAT7011A	General Neuroanatomy ANAT7011A
Principles of Physiology and Medical Biochemistry in relation to the Nervous System PHSL7004A	Principles of Physiology and Medical Biochemistry in relation to the Nervous System PHSL7004A	Principles of Physiology and Medical Biochemistry in relation to the Nervous System PHSL7004A	Principles of Physiology and Medical Biochemistry in relation to the Nervous System PHSL7004A
Research Techniques FAHS1595A	Developmental Problems in Childhood PAED7014A	Developmental Problems in Childhood PAED7014A	Research discussions & optional talks.

COURSE DURATION

Full-time students complete four units in Year 1, four units in Year 2 and the research report in Year 3.

2018 DATES

Closing date for applications:

31 October 2017

Interested candidates are strongly advised to apply to the Faculty of Health Sciences Postgraduate Office before the closing date.

Dates are subject to change. Final dates will be sent to successful candidates as soon as they are available.

POSTGRADUATE OFFICE CONTACT DETAILS

South African and foreign nationals PLEASE contact the Postgraduate Office for application forms and fees.

Admissions Officer - Anna Muronga

T + 27 011 717 2076

E anna.muronga@wits.ac.za

Programme Coordinator - Professor Lorna Jacklin

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www.wits.ac.za/academic/health/faculty-services/research-and-postgraduate-offices/

2nd floor, Phillip V Tobias Building,
29 Princess of Wales Street, Parktown 2193, Johannesburg

The aim of the MSc Med Child Health neurodevelopment programme is to give professionals working in the field of child development an understanding and proficiency in the field of child developmental and behavioural paediatrics, as well as research. Graduates will be able to apply their knowledge to the evaluation and management of children with developmental delays.

COURSE STRUCTURE

The course is in three parts.

PART 1 (Year 1)

Basic information to provide a scientific basis for the understanding of child development.

- General Neuroanatomy
- Principals of Physiology and Medical Biochemistry in relation to the nervous system
- Developmental Problems in Childhood
- Research Techniques

PART 2 (Year 2)

Clinical application of the information provided in Part 1, Year 1, to the understanding of developmental delay or pathology such as autism.

- Behavioural Problems in Childhood
- Paediatric Neurology
- Psychological Medicine
- Epidemiology for Health Researchers

PART 3 (Year 3)

Presentation of a research report. The report should be started in Year 1 when a protocol will be developed during the research techniques course. Guidance will be provided in the epidemiology course providing basic information on the development of the research report.

BRIEF DESCRIPTION OF UNITS

PART 1

General Neuroanatomy

This unit is designed to give an understanding of brain development, anatomy and function. It provides a basis in the understanding of brain structure and function.

Principals of Physiology and Medical Biochemistry in relation to the nervous system

This unit will cover the physiology of the brain and nervous system which is essential in the understanding of the function and dysfunction of the nervous system. In addition it provides the basis for understanding tests such as vision and hearing tests.

Developmental Problems in Childhood

This unit introduces the student to the theories underlying the assessment of child development and developmental theory. Developmental tools will be discussed as well as tests available for testing the systems which underlie normal development such as vision and hearing. The students will also be introduced to the basic principles of genetics.

Research Techniques

Students will be trained in every part of the research cycle (question formulation; literature review; use of secondary sources; primary and secondary argumentation; ethics; methodology; plagiarism and the collection and analysis of primary data; the role of the ethics committee and the writing of a research report.

PART 2

Behavioural Problems in Childhood

This unit will utilise information acquired in Year 1 and apply it to an understanding of developmental delay and assessment of different aspects of delay. In addition to methods of assessment, management principles will also be discussed.

Paediatric Neurology

The different mechanisms of neurological abnormality and pathology as well as principles of diagnosis are discussed. The management of common paediatric neurological conditions will be demonstrated and discussed in the clinical environment.

Psychological Medicine

This unit will address principles underlying the development of psychological and psychiatric disorders in childhood. Common disorders will be discussed. The students will also be exposed to the psychiatric team and principles of management will be discussed and demonstrated.

Epidemiology for Health Researchers

This is an introductory course in epidemiology. The aim is to provide tools necessary to interpret and understand common concepts used in epidemiology which is a public health measurement tool.

An initial overview of the development of modern epidemiology is presented and aspects of causal inference are discussed. The importance of accurate and appropriate measurement in epidemiological research is highlighted. Different measures of disease frequency, effect and impact are discussed in detail, and students will gain competence in the calculation and interpretation of these measures.