



SACEMA
DST-NRF Centre of Excellence in Epidemiological Modelling and Analysis

SHORT COURSE ON INTRODUCTION TO EPIDEMIOLOGY & RESEARCH METHODOLOGY

University of Stellenbosch, June to September 2017

This course, to be registered as a University of Stellenbosch Short Course, will take place over 13 sessions 10h00 – 12h00, on Tuesdays, at SACEMA, starting 27 June 2017, with some weeks skipped by arrangement with the class. The presenter is Dr Jo Barnes, Division of Health Systems & Public Health, Faculty of Medicine and Health Sciences, Tygerberg.

The course is open to University of Stellenbosch students at no charge. Registration should be done online at www.sacema.org. Enquiries may be directed to the SACEMA Workshop Administrator, Ms Christianah Olojede, at christianah@sun.ac.za, phone 021 8082782.

Course overview: Epidemiology is broadly defined as the study of the distribution and determinants of health-related states or events in specified populations and the application of this study to the prevention and control of health problems. Encompassing the methods and research designs needed to interpret evidence of health research, epidemiology is not only a discipline of the health sciences in itself, but also a much needed skill for practitioners in other branches of health research. Epidemiology concentrates on questions like these: What are the determinants, distribution and frequency of disease? Who gets ill and why? What are the crucial differences between those who become ill and those who do not? (Both sick and healthy people are to be studied.) How effective are interventions in treating disease, and in stopping further spread? How effective are health services in addressing health needs? What information do they need to make decisions? What is the risk assessment, and what is the threshold for action?

This short course is presented as a series of 13 lectures: Introduction, basic tools; Demographic aspects; Cross-sectional designs; Construction of questionnaires; Case-control studies; Cohort designs, randomised controlled trials; Sampling; Screening and surveillance; Bias in design; Causation; Disease clusters, outbreaks; Hints on writing a research proposal; Hints on writing research papers and constructing conference presentations.