

University of Pretoria Yearbook 2016

Chemical and microbiological aspects of food 451 (FPP 451)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	20.00
Prerequisites	Third-year status or TDH
Contact time	2 lectures per week, 1 practical per week
Language of tuition	English
Academic organisation	Food Science
Period of presentation	Semester 1 or Semester 2

Module content

Chemical aspects: The role and composition of the major chemical components of food (water, carbohydrates, proteins and lipids). The content and nutritional role of different minor chemical components of food (minerals and vitamins). The principles and control of enzymic and non-enzymic browning. The composition and use of enzymes in food processing. Microbiological aspects: Introduction to micro-organisms. Intrinsic and extrinsic factors that affect growth and survival of micro-organisms. Important microbial groups in food. Microbial spoilage of foods. Determination of micro-organisms and/or their products in foods. The preservation of foods. Microbial indicators of food safety and quality. Food borne diseases and intoxications. The utilisation of micro-organisms in food production.

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