

# MASTER OF SCIENCE IN MEDICINE (EXPOSURE SCIENCE)

(Short Courses 2021)



## MASTER OF SCIENCE IN MEDICINE (EXPOSURE SCIENCE) SHORT COURSES FOR 2021

Type	Price	Date	Venue	Course Code	Course name
Competence	R 6 500.00	3 - 7 May 2021		SPUH0146	Exposure Science I
Attendance	R 6 000.00	3 - 7 May 2021		SPUH0147	Exposure Science I
Attendance	R 6 500.00	2 - 6 Aug 2021		SPUH0150	Fundamentals of Risk Assessment
Competence	R 6 000.00	2 - 6 Aug 2021		SPUH0151	Fundamentals of Risk Assessment
Attendance	R 6 500.00	6 - 10 Sept 2021		SPUH0148	Exposure Control I
Competence	R 6 000.00	6 - 10 Sept 2021		SPUH0149	Exposure Control I

### EXPOSURE SCIENCE I

This short course introduces fundamentals of exposure science, with emphasis on the similarities of the underlying mechanisms and processes from release at the source to emission at the receptor in environmental, consumer and workplace exposure. This is imperative to broaden the view of the participants and promote a holistic approach of external exposure, the intake or uptake, and potential health outcomes.

### THE COURSE COVERS THE FOLLOWING TOPICS:

- Introduction to exposure science and exposure ontology
- Characteristics of workplace, residential, environmental and consumer exposure
- Relationship between outdoor-indoor exposure
- Aggregated and cumulative exposure
- Inhalation models from exposure to dose, and basic kinetics (absorption, distribution, metabolism, excretion)

### CERTIFICATE TYPE: COMPETENCE OR ATTENDANCE APPLICATION DEADLINE: 29 MARCH 2021

**Competence:** Outsiders – R6 500  
From Wits – R3 250

**Attendance:** Outsiders – R6 000  
From Wits – R3 000

### FUNDAMENTALS OF RISK ASSESSMENT

The short course aims to introduce participants to risk governance which includes risk assessment, management and communication. The course introduces the basic principles of risk assessment, and elaborates on regulatory, probabilistic and comparative risk assessment. The strengths and limitations of control banding, in general, are explored, in addition to some specific tools, with practical exercises. Different risk assessment and prioritisation tools are also introduced in this course.

- Fundamentals of risk assessment
- Regulatory risk assessment & probabilistic risk assessment
- Introduction to comparative risk assessment & alternatives assessment
- Life cycle (inventory) and assessment
- Risk assessment/prioritisation tools
- Exposure-induced risk and health status
- Exposure-induced risk and vulnerable groups

**CERTIFICATE TYPE:  
COMPETENCE OR ATTENDANCE  
APPLICATION DEADLINE:  
28 JUNE 2021**

**Competence:**

Outsiders – R6 500  
From Wits – R3 250

**Attendance:**

Outsiders – R6 000  
From Wits – R3 000

**EXPOSURE CONTROL I**

This short course aims to introduce participants to principles of risk and exposure controls. Different types of controls will be introduced according to the hierarchy of controls with practical examples. Selection or identification of controls through stakeholder engagement, cost-effectiveness analysis and other tools such as Multi-criteria decision analysis will also be introduced.

**THE COURSE COVERS THE FOLLOWING TOPICS:**

- Fundamentals of intervention/ implementation science
- Formative research
- Stakeholder communication
- Cost-benefits/cost effectiveness
- Health economics
- Multi-criteria decision analysis
- Resilience interventions

**CERTIFICATE TYPE:  
COMPETENCE OR ATTENDANCE  
APPLICATION DEADLINE:  
02 AUGUST 2021**

**Competence:**

Outsiders – R6 500  
From Wits – R3 250

**Attendance:**

Outsiders – R6 000  
From Wits – R3 000



**CONTACT DETAILS**

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