

# LEARNING WORKS

Seminar Series

## 2016

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### Number 6

**Presenter** Dr Andrew Craig

*Identification And Support Of Large Groups Of At-Risk First-Year Calculus Students*

**Abstract**

An analysis of various predictors of the performance of first-year students at the University of Johannesburg from the period 2012 - 2014 was carried out. In response to the findings of the analysis a Saturday morning intervention, making use of two e-learning tools, was implemented to help students improve. The analysis and the success of the intervention are presented.

**Date** Tuesday 25 October 2016

**Time** 10:30

**Place** Botany 2-23

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### Numbers 4 & 5

**Presenter** Prof Ansie Harding

*The Role of Storytelling in Mathematics*

**Abstract**

Storytelling is part of human social culture. This talk is on the educational aspect of storytelling on a tertiary level in mathematics. The talk will illustrate what the ingredients are of a good story, when and how to incorporate storytelling in mathematics teaching, where to fit storytelling into a busy lecturing schedule and how coherence can be fostered through storytelling.

**Date** Tuesday 13 September 2016

**Time** 10:30

**Place** Mathematics 2-13

*The Mathematics of Fairy Tales*

**Abstract**

For truly understanding the fairy tales of your childhood you need a solid background in calculus. This bold statement will be illustrated in an entertaining and very different look at the well-known fairy tales.

**Date** Tuesday 20 September 2016

**Time** 10:30

**Place** Mathematics 2-13

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**Number 3**

**Presenter** Mrs Wanda Conradie

*The South African Higher Education Landscape and Local Experiences in Webassign*

**Abstract**

This well-received talk was given at the Cengage Sales Conference in Berlin in July 2016. The talk provides a sketch of the tertiary landscape in South Africa and focuses on the use of Webassign in the department, also providing data analytics.

**Date** Tuesday 30 August 2016

**Time** 10:30

**Place** Mathematics 2-13

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## **Number 2**

**Presenter** Mr Gideon Brits

*HOW DOES PERFORMANCE IN MULTIPLE CHOICE QUESTIONS AND PAPER QUESTIONS IN THE DEPARTMENT'S TESTS AND EXAMS COMPARE?*

### **Abstract**

Because of the extensive marking load experienced a decision was taken to make use of multiple choice questions in assessment that could be graded by means of computer software. This practice has been the subject of criticism for a number of reasons. In order to address the issue data was sourced from four first year modules, focusing on performance marks in two semester tests and the exam in each of the modules over a period of four years.

**Date** Friday 20 May 2016

**Time** 10:30

**Place** Botany 2-23

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## **Number 1**

**Presenter** Mrs Karin Bothma

*CLICKER QUESTIONS FOR SUCCESSFUL LEARNING IN THE MATHEMATICS CLASSROOM*

### **Abstract**

From an active learning perspective, successful learning is dependent on interactive learning activities engineered by the lecturer in order to engage students. Classroom response systems (or clickers) can be used as a tool to promote student engagement in large mathematics classes. As with all technology, it is not the use of clickers itself that promote learning. At the centre of this process is the effective

design of a clicker question based on an underlying pedagogy. We investigate the design and use of clicker questions in order to promote successful mathematics learning.

**Date** Friday 15 April 2016

**Time** 10:30

**Place** Botany 2-23