



## **CNS Nuclear 101 Course (3)      2013 May 13-14**

A general-level background outreach course for people working in the Industry as well as anyone interested in obtaining a good understanding of Nuclear issues.

**May 13 and 14, 2013**

**Location: McMaster University – Note change to new room: **Room ETB-533 in Engineering Technology Building (ETB)****

**Instructors: Doug Boreham, Jason Donev, Jeremy Whitlock**

### **Tentative Course Summary**

The course includes three modules:

#### Nuclear Fuel Cycle (JD)

Basic introduction to energy flow, nuclear theory and how nuclear power stations work. An overview of the nuclear fuel cycle (exploration, mining, processing enrichment and nuclear power generation), nuclear waste storage and reprocessing.

#### Nuclear Myths and Reality (JW)

Review of nuclear history of nuclear power, nuclear accidents, and nuclear benefits to society. Common public misperceptions and how to deal with them. Frequently-Asked-Questions about nuclear technology, and effective ways to answer them to a non-technical audience.

#### Radiation and Risk (DB)

Ionizing radiation and its effect on the environment and the human body. Overview of safety, particularly in the context of nuclear accidents. Risk and the public perception of radiation.

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## **Timetable**

*A Continental Breakfast will be available on both days*

Day 1	8:00 am	Continental Breakfast
	8:30 – 8:45 am	Course overview. Introduction of Instructors
	8:45 – 12:00	Introduction to Nuclear Theory and the Nuclear Fuel Cycle (Coffee break 10:00 – 10:15 am)
	12:00 – 12:45 pm	Lunch
	12:45 – 4:00 pm	Nuclear Myths and Reality (Coffee break 2:15 – 2:30 pm)
	Tour of McMaster Research Reactor	4:15 – 5:45 pm
	Evening – Optional Informal Dinner	
Day 2	8:00 am	Continental Breakfast
	8:45 – 12:00	Radiation and Risk (Coffee break 10:00 – 10:15 am)
	12:00 – 12:45 pm	Lunch
	12:45 – 1:00 pm	Hand-out of Evaluation Forms / Presentation of Course Certificates
	1:00 – 2:30 pm	Question Period / Panel Discussion (DB, JD and JW) (Coffee break 2:30 – 2:45 pm)
	2:45 – 4:30 pm	Hands-on Workshops / Demonstrations
	4:30 – 5:00 pm	Return of Course Evaluation Forms