

# SH2606: Management in the Nuclear Power Industry

## Teachers

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## Language

The course is taught in English.

## Course book

*Reframing Organizations*, 3<sup>rd</sup> edition or later, L. G. Bolman and T. E. Deal, Jossey-Bass.

## Course objectives and learning outcomes

The objective of the course is to give you an insight in the management aspects of operating nuclear facilities. The course focuses on safety culture issues in power plant operation but most of the discussions are straight forward transferable to other facilities throughout the industry. After the course you should be able to:

- Identify situations where the principle of "safety first" would appear to be in conflict with other operational objectives.
- Be able to use established system indicators to ensure a high level of safety culture in nuclear organisations.

## Examination

The examination consists of two parts, attendance on the seminars and a home assignment. You have to attend 80% (eight) of the seminars and hand in the home assignment before the scheduled deadline to pass the course. Only pass or fail grade is given in this course.

## The home assignment

On the first seminar you are given a historical event from the nuclear power industry. This is the scenario that you are to analyse as a home assignment during the course. The home assignment consists of three parts. As the first part of the home assignment you are given the task to describe the event, what happened, where and when?

The second and third part of the assignment consists of an analysis of the event using warning flags (second part) and the organisational model from Bolman and Deal (third part).

The teacher will not give you any material on the event; it is up to you to find reliable sources. It is therefore important that you refer to your sources in a correct way in the handed in assignment.

## The seminars

This course consists of eleven seminars at which the material of the course is discussed. You therefore have to attend at least 80% of the seminar and hand in the home assignment to pass the course. Before each seminar you should have read the indicated texts below.

	Content	Text to read before seminar	To hand in before seminar
Seminar 1: 31/8, 8-10 in FB51	Introduction to the course and safety culture. Home assignment handed out.		
Seminar 2: 2/9, 8-10 in FB41	Warning flags and their usage.	Text handed out on first seminar	
Seminar 3: 7/9, 8-10 in FB41	The structural frame	Part one and two in Bolman and Deal.	Three good quotes
Seminar 4: 9/9, 8-10 in FB41	The human resource frame	Part three in Bolman and Deal and IAEA report IAEA-TECDOC-1358.	Three good quotes
Seminar 5, 14/9, 8-10 in FB41	Discussion on home assignment		First part of home assignment
Seminar 6: 16/9, 8-10 in FB41	The political frame	Part four in Bolman and Deal.	Three good quotes
Seminar 7: 21/9, 8-10 in FB41	The symbolic frame	Part five in Bolman and Deal.	Three good quotes
Seminar 8: 23/9, 8-10 in FB41	The Columbia accident	NASA report: Columbia Accident Investigation Board	
Seminar 9: 5/10, 8-10 in FB41	Analysing nuclear power incidents	Material handed out on earlier seminar	
Seminar 10: 7/10, 8-10 in FB41	Wrap-up and evaluation		Full home assignment
Seminar 11: 12/7, 8-10 in FB41	Wrap-up and evaluation		