

GEO4270 Integrated basin analysis and prospect evaluation (2014)

Objectives: Give students an introduction to integrated analysis of geological and geophysical data at both basin and reservoir scales, as well as experience with several computer based tools.

Course content: The course comprises case studies focusing on various themes/topics within basin analysis and prospect evaluation. An introduction will be given to each theme/exercise before the students start their work/data analysis. The results are integrated and presented in written reports. A final presentation and discussion close the exercise.

Teachers: Jan Inge Faleide & Sebastien Gac (Ex. 1), Michel Heeremans (Ex. 2).

Exercises (northern North Sea):

1. Basin analysis
 - Construction of regional profile – integrated analysis of seismic, gravity and magnetic data
 - 2D basin modelling (TecMod) of regional profile

2. Prospect evaluation (Petrel)
 - Stratigraphic modelling (well correlation – facies and petrophysics)
 - Model building and property modelling

Schedule Autumn 2014:

Week	Monday	Tuesday	Wednesday	Thursday	Friday
36 (Sep 1-5)	Introduction 12:15-14 Aud II	Read key literature	Read key literature	Read key literature	Read key literature
37 (Sep 8-12)	Basin Modelling intro 12:15-14 Aud II		TecMod intro 09:15-11 IT-lab (room 209)		
38 (Sep 15-19)	Progress Exercise 1 12:15-13 Aud II				
39 (Sep 22-26)	Progress Exercise 1 12:15-13 Aud II				
40 (Sep 29-Oct 3)	Progress Exercise 1 12:15-13 Aud II		Report deadline Exercise 1 (16:00)		Review Exercise 1
41 (Oct 6-10)	GEO4011 (Ainsa)				
42 (Oct 13-17)	GEO4260 (lab)				
43 (Oct 20-24)	Introduction Exercise 2 + Petrel course (detailed schedule to be announced later)				
44 (Oct 27-31)	Progress Exercise 2 12:15-13 Aud II				
45 (Nov 3-7)	Progress Exercise 2 12:15-13 Aud II				
46 (Nov 10-14)	Progress Exercise 2 12:15-13 Aud II				
47 (Nov 17-21)	Progress Exercise 2 12:15-13 Aud II		Report deadline Exercise 2 (16:00)		
48 (Nov 24-28)	Review Exercise 2 12:15-14 Aud II				
49 (Dec 1-5)	Exam*	Exam*			

*Tentative dates for the oral exam

- Course information, lectures and other relevant material will be loaded into **Frontier**
- See also literature list with links on the course web-page