

LECTURE PLAN FOR FYS 3610 AUTUMN 2009

- Lectures: Tuesday 10:15-12:00 Room V316 Chemistry Building
Wednesday 12:15-14:00 Room V316 Chemistry Building
- Seminar : 10:15-12:00 Room V316 Chemistry Building
- 3 hours mid-term examination written (counts 20%)
- Project work (counts 20%)
- Oral examination (counts 60%)

Week	Topic	Curriculum	Lecturer
34 6h	Introduction The Earth's Atmosphere The Earth's magnetic field	Compendium Ch 2 - pdf Compendium Ch 3 – pdf	JM
35 4h	The Lorentz Force and single particle motion continued: - Gyromotion - Zeroth order drifts (ExB, Grad B, Curvature) - Magnetic momentum, pitch angle and loss cone Maxwellian distribution and plasma temperature MHD description Ionosphere.	Ch 2.1-2.5 K&R Compendium Ch 4 – pdf	JM
2h	Seminar		HS
36 6h	Ionosphere cont Ionospheric currents	Compendium Ch 4 – pdf Compendium Ch 5 – pdf	JM
37	Earth atmosphere – Ozone - UV	Compendium	TS
38 4h	Ionospheric currents and magnetic deflections	Compendium Ch6 – pdf	JM
2h	Seminar	Wednesday: 1615-1800	HS
39 4h	The Sun and Solar Activity, Frozen-in, Reynolds number, Solar wind parameters and time lag	Ch 3.1-3.3, 3.5-3.6, 3.8-3.9 K&R Ch 4.1-4.3, 4.4-4.5 (descriptive) K&R	JM
2h	Seminar		HS
40	6h Exercises		HS
41	Midterm examination		
42	Aurora Seminar	Ch 14 K&R	JM/AE HS

43	Earth's atmosphere – ozone - UV	Compendium	TS
44			
27Oct	UV radiation impact on humans	Ch 7–Moan.pdf	JohanM
28Oct	Ionospheric convection	Ruohoniemi&Greenwald	JM
30Oct	Seminar		HS
45	Polar cap patches	Article	JM
	Space Weather		
2h	Seminar		HS
46	Project :Work Aurora or Ozone/UV	Field trip to Andøya Blindern	JM TS
47	Submit the project work	Deadline 20 November	
48	Repetition		JM/TS
	ORAL EXAMINATION	27 November	

Version 11 September 2009

TS : Associate Prof. II Tove Svendby

HS: Ph.D. student Hiroatsu Sato

JM: Prof. Jøran Moen

JohanM: Prof. II Johan Moan

AE: Alv Egeland