

Lecture and exercise plan 2016  
Issued 21 January 2016, revised 20 April 2016

- Book "Antennas and propagation for wireless communication systems", second edition, by Simon R. Saunders and Alejandro Aragón-Zavala.  
Published by John Wiley & Sons in 2007, ISBN 978-0-470-84879-1
- Own lectures: Radio front-end and Free-space optics
- Additional material for PhD: agree one or two journal articles for PhD student to present

Date	No	Topic
22 January	1	Ch. 1 & 4.1-3. Introduction
29 January	2	Ch. 2 - 3.4. EM waves & propagation mechanisms. Exercise
5 February	3	Ch. 3.5 & 4.4. Diffraction & Dipole. Exercise
12 February	4	Ch. 4.5 - 5. Array antennas & basic propagation. Exercise
19 February	5	Ch. 6. Terrestrial fixed link (clear air & diffraction). Exercise
26 February	6	Ch. 7. Satellite fixed link (rain & ionosphere). Exercise
4 March	7	Ch. 8-9. Macro cells & shadowing. Exercise
11 March		Lecture free
18 March		Lecture free
25 March		Easter holiday
1 April	8	Own lecture on Radio front-end and Free-space optics. Exercise
8 April	9	Ch. 10-11. Narrowband & wideband. Exercise
15 April	10	Ch. 12-13. Micro & pico & mega cells. Exercise
22 April	11	Ch. 15-16. Mobile system antennas & Overcome narrowband with diversity. Exercise
29 April	12	Ch. 14. Mega cells. Ch. 17-18, complementary material to guest lecture. Exercise
6 May		Lecture free
13 May	13	Per Hjalmar Lehne: Guest lecture on MIMO and massive MIMO. Exercise
20 May		Lecture free
27 May		Oral exam

**January**

Week	Mo	Tu	We	Th	Fr	Sa	Su
53					1	2	3
1	4	5	6	7	8	9	10
2	11	12	13	14	15	16	17
3	18	19	20	21	22	23	24
4	25	26	27	28	29	30	31

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**February**

Week	Mo	Tu	We	Th	Fr	Sa	Su
5	1	2	3	4	5	6	7
6	8	9	10	11	12	13	14
7	15	16	17	18	19	20	21
8	22	23	24	25	26	27	28
9	29						

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**March**

Week	Mo	Tu	We	Th	Fr	Sa	Su
9	1	2	3	4	5	6	7
10	8	9	10	11	12	13	14
11	15	16	17	18	19	20	21
12	22	23	24	25	26	27	28
13	29	30	31				

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**April**

Week	Mo	Tu	We	Th	Fr	Sa	Su
13					1	2	3
14	4	5	6	7	8	9	10
15	11	12	13	14	15	16	17
16	18	19	20	21	22	23	24
17	25	26	27	28	29	30	

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**May**

Week	Mo	Tu	We	Th	Fr	Sa	Su
17							1
18	2	3	4	5	6	7	8
19	9	10	11	12	13	14	15
20	16	17	18	19	20	21	22
21	23	24	25	26	27	28	29
22	30	31					

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**June**

Week	Mo	Tu	We	Th	Fr	Sa	Su
22			1	2	3	4	5
23	6	7	8	9	10	11	12
24	13	14	15	16	17	18	19
25	20	21	22	23	24	25	26
26	27	28	29	30			

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