

Lesson Plan						
Period	Date (Tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
1	25/8	Introduction	4			
2	26/8	Radiation mechanism, Single wire				
3	27/8	2-wire dipoles, current distribution on thin wire antenna		Black		
4	28/8	Antenna Parameters Radiation patterns		Board		
5	1/9	Patterns in Principal planes, Main lobe Sidelobes, beamwidth				
6	3/9	Beam Area, Radiation Intensity, Beam efficiency				
7	4/9	Directivity, gain and resolution, Aperture				
8	5/9	Aperture efficiency effective height, Related problems				
9	8/9	Problems.				
10	9/9	Retarded Potentials	2			
11	10/9	Radiation from small electric dipole				
12	11/9	Quarterwave monopole & Halfwave dipole		Black		
13	12/9	current distributions		Board		
14	15/9	Evaluation of field components, power radiated				
15	16/9	Radiation resistance				
16	17/9	Beam widths, directivity				
17	18/9	Effective area & effective height				
18	19/9	Natural current distributions				

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19	22/9	fields and patterns of thin linear center fed antennas				
20	23/9	Radiation resistance at a pt. which is not ^{may} current				
21	24/9	Antenna theorems applicability				
22	25/9	and proofs for R_r of directional ch.		Black		
23	26/9	loop antennas. small loops - field comp.		Board.		
24	29/9	Comparison of far fields of small loop & short dipole				
25	30/9	Concept of short magnetic dipole				
26	1/10	D & R_r relations for small loops				
27	6/10	Problems				
28	7/10	continued				
29	8/10	2-element arrays different cases.	3.			
30	9/10	Principle of pattern multiplication				
31	10/10	N-element uniform linear arrays		Black		
32	13/10	Broadside, End fire arrays.		Board &		
33	14/10	EFA with increased directivity		ppts		
34	15/10	Derivation of their ch. and comparison				
35	16/10	concept of scanning arrays.				
36	17/10	Directivity relations Problems.				

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
37	20/10	Binomial arrays Effects of uniform non Amplitude dist.				
38	21/10	Design Relations.				
39	22/10	Introduction Travelling wave antennas	4			
40	23/10	Basic concepts. Long wire antennas				
41	24/10	Field strength calculations and pattern				
42	27/10	V-antennas, Rhombic antennas, design relations		Black		
43	28/10	Helical antennas, signifi- Geometry, basic prop.		Board		
44	29/10	Design considerations for mono-filar helical antennas				
45	30/10	In axial and normal modes.				
46	31/10	Continued.				
47	3/11	Arrays with parasitic elements Yagi-Uda array.	5.	Black		
48	4/11	Folded dipoles, ch. Reflector antenna ^{int}		Board		
49	5/11	Flat sheet and corner ref, Parabolic dish.				
50	6/11	Geometry, character- istics, types of feeds				
51	7/11	F/p ratio, spillover				

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
52	10/11	Back lobes				
53	11/11	Aperture Blocking		"		
54	12/11	offset feeds, cassegrainian feeds				
55	13/11	Horn antennas - types	6			
56	14/11	optimum horns Design ch. of pyramidal horns				
57	24/11	Lens antennas Geometry, features		Black Board		
58	25/11	Dielectric lenses and zoning.				
59	26/11	Applications Antenna measurements				
60	27/11	Patterns required, sety distance criterion				
61	28/11	Directivity and gain measurements				
62	1/12	Propagation, Frequency ranges, & types	7			
63	2/12	Groundwave, ch. parameter, wave tilt		Black Board		
64	3/12	Sky wave prop, ch. mechanism of Refl. & Refr. f_c , MUF, skip distance				
65	4/12	optimum freq. Ionospheric absorption				
66	5/12	Ionospheric abnormalities				

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Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
67	8/12	Fundamental of for free space prop. Basic txn. loss.	8			
68	9/12	Space wave prop mechanism		Black		
69	10/12	Tropospheric wave PROP. Radius of curv.		Board		
70	11/12	Effective earth radius, Effect of earth curvature				
71	12/12	Field strength calc. M-curves & duct prop. Troposph. Scattering				

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12/14