

	<u>Hours</u>
Circular Restricted Three-Body Problem	
surfaces of zero velocity	3
stability, libration points, halo orbits	3
invariant manifolds, low-energy transfer, low-thrust/invariant manifold transfer	2
General Perturbations	
state transition matrices	2
solutions to Kepler's Eqn., chaotic mappings	1
Gauss and Lagrange planetary equations	4
Hamilton's principle, canonical equations	5
Special Perturbations	
Cowell's method, Encke's method	1
numerical integration methods	1
coordinate transformations, regularization	2
Motion of an Artificial Satellite	
canonical and Lagrange treatment of perturbations	4
Earth zonal and tesseral harmonics	3
atmospheric drag and 3rd-body perturbations	4
Orbit Determination	
initial orbit determination	2
orbit improvement from observations	2
introduction to interplanetary navigation	2