

ICTP DIPLOMA PROGRAMME IN EARTH SYSTEM PHYSICS 2014-15

SYLLABUS

**Earth System Dynamics and Modelling [12 lectures: 18 hours] -
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Lecture 1	Discretization of the equation of global and regional domains; coupling
Lectures 2, 3, 4	Parameterization of subgrid processes; turbulence; cloud convection; radiation
Lecture 5, 6	Land-surface modeling
Lecture 7, 8	Hydrological modeling
Lecture 9, 10	Ocean and Sea-ice modeling
Lecture 11, 12	Atmospheric chemistry modelling