Syllabus for Rivers, Floodplains, and Management, 3XXX

Lecture 1	**Introduction to rivers and floodplains**: types, scales, and geographies; primary controls; major management issues
Lecture 2	**Fluvial hydrology**: river networks; rainfall and runoff; flood routing; channel capacity; flood risk
Lecture 3	**Sediment at the grain scale**: sediment loads; sediment transport; bedforms spatial and temporal storage; sediment budgets
Lecture 4	**Sediment at the reach scale**: sediment supply; hillslope connectivity; channel adjustment to supply
Lecture 5	**Sediment at the basin scale**: spatial and temporal storage; source to sink sediment budgets; grain size sorting
Lecture 6	**Fluvial form**: hydraulic geometry; channel pattern; banks and bars
Lecture 7	**Floodplain development**: vertical accretion; meander migration; levees, splays, and depositional webs
Lecture 8	**River management**: flood control; water supply; water quality; aquatic habitat
Lecture 9	**Floodplain management**: agriculture and settlement; contamination; riparian habitat
Lecture 10	**Sediment sinks**: deltas, beaches and reefs; course summary