

Lagoons and Fixed Film Processes: This **75-minute** class presents the method of operation for lagoons and various fixed film processes including trickling filters, rotating biological contactors, biological aerated filters, and others. Basic design principals are discussed for lagoons as well as biological processes taking place in aerobic, facultative, and anaerobic ponds. Differences between fixed film systems and suspended growth / hybrid systems are discussed as well as typical operating ranges for each system type including hydraulic and organic loading rates. This course is supplemented with many photographs showing different technologies with descriptions of the functions of various pieces such as the plenum, underdrain, and distributors.