Course Number ENS-208-01 **Course Description** This course will introduce students to various sources of solid waste materials including hazardous and nonhazardous waste, and biodegradable and non-biodegradable waste. Focus areas are overview of landfill systems, geosynthetics, geotextiles, geomembranes, geonets, single clay liner, single geomembrane liner, composite liner systems, leak detection and leachate collection, removal and treatment of leachate, and capping and closure systems. The recycling segment will explore natural resources of raw materials including origin and use. It will also investigate the potential and limitation for recycling of materials. The focus area will be various applications of recycling recyclable and nonrecyclable materials especially non-biodegradable waste. Discussion of methods of manufacture and compositions of such materials will concentrate on advanced industrial applications for the reuse of non-recyclable waste materials. Application areas include production of new materials, materials with superior qualities for special purposes, and materials with high level of resistance against certain environmental conditions. The course will also touch on the political aspect of recycling including consumer attitude and government incentives to encourage recycling. Academic Term 22/SP Instructor Ghaly, Ashraf Location & Meeting Time Wold Center-028+ T/TH 09:00AM-10:45AM LEC Credits 1.00 Capacity 12 **Total Students** 6 Common Curriculum SET Science, Engineering Tech Interdisciplinary Programs Science, Medicine & Tech in Cu **Environmental Science & Policy** Academic Department **Environmental Science & Policy** Field Of Study

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