



جامعة الإمارات العربية المتحدة
United Arab Emirates University

**The College of Graduate Studies and the College of Science Cordially Invite
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Master Thesis Defense

Entitled

*THE DEVELOPMENT OF A HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT SYSTEM FOR
AN INTEGRATED GENDER SEPARATED CAMPUS IN THE MIDDLE EAST REGION – A CASE
STUDY*

by

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Abstract

In recent years, concerns regarding health, safety and environmental issues have increased. This led to the development of integrated Health, Safety and Environment (HSE) Management Systems in many organizations, including universities. The study of the current HSE management system of the United Arab Emirates University (UAEU) has been conducted as a typical National university in the Middle East Region with the added unique feature of a large integrated campus with gender separation. Emphasis has been given to the E-shared laboratories of the UAEU as the interface between the two sides (male/female) of the campus. The E-shared laboratories incorporate most of the teaching laboratories of the Colleges Food and Agriculture, Engineering and Science, and it is here that most of the chemicals and biological samples of the university can be found. At the same time, the E-shared laboratories present a physical bottle-neck in the movement between campuses, also in emergency situations. Spatial Analysis has been conducted to model crowd behavior in the E4-shared laboratories building in emergency situations. Also, in regard to environmental concerns within the health and safety infrastructure, the waste treatment with silica gel and recycling of silica gel in educational and small research laboratories has been studied.

Keywords: Occupational Safety and Health Management System, Environment, Spatial Analysis, Chemical Inventory, Recycling, Silica gel, Hazardous waste.