Course: ENPM 625 – Heating, Ventilation and Air Conditioning
Semester: Spring 2017
Day(s): Thursday
Time: 7:00pm to 9:40pm
Location: TBA
Instructor: Karim Amrane, Ph.D., Air Conditioning, Heating, and Refrigeration Institute
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Course Description

This course focuses on developing fundamentals necessary for HVAC analysis and design, and should be useful for students interested in design and project management, including mechanical, environmental and facilities engineers. The appropriate thermodynamic, heat transfer, and digital control principles are applied to problems encountered in this field. Quantitative analyses (i.e., numerical problems) are stressed through homework and examination. The topics that will be covered are listed below. A particular emphasis will be placed on the latest computer methods for building energy analysis and case studies.

Required/Recommended Textbooks


-Required? (Y)

Course Outline

HVAC System Design
Moist Air Properties
Heat Transmission
Solar Radiation
Heating Load
Cooling Load
Pumps
Fans
Direct Contact Heat and Mass Transfer
Heat Exchangers
Building Controls