# SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY SAULT STE. MARIE, ONTARIO

# COURSE OUTLINE

Course Outline:	FACILITY DESIGN AND PLANNING	
Code No,:	HMG241	
Program:	HOTEL ANC RESTAURANT MANAGEMENT	
Semester:	IV	
Date:	JANUARY, 1988	
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New: Revision:

APPROVED:

-^Chairperson

Date

FACILITY DESIGN & PLANNING

HMG241

Course Name

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## Performance Objectives:

The objective for this course is to familiarize students with various mechanical installations and with their maintenance in hotels, resorts and restaurants.

A general knowledge of the topics of building exteriors, landscaping, heating, electrical, plumbing, ventilation and air conditioning, refrigeration, vertical transportation and fire safety control will be gained by the students.

#### Method of Assessment:

Written Tests - 75% Attendance & Participation - 10% Projects - 15%

<u>Textbook:</u> "Maintenance and Engineering for Lodging and Food ServiceTacilities' by Franf D. Borsenik, 1977

#### Grading:

The following grade symbols will be used in assessing and grading assignments and projects:

A+ - 95%-100% (consistently outstanding achievement)
A - 76%- 94% (outstanding achievement)
B - 66%- 75% (consistently above average achievement)
C - 55%- 65% (satisfactory or acceptable achievement)
X or R - 0%- 54% (Incomplete or repeat)

Marks will be accumulated and averaged using assignments and tests. Assignments will be handed in by due dates, otherwise loss of marks will result or new assignments issued.

#### Topics and Descriptions:

## A) Introduction to Maintenance and Engineering:

- maintenance and engineering
- chief engineer as a manager
- decision-making function
- policy formulation
- organization
- responsibilities of chief engineer
- repair and maintenance
- planning, control, communication and directing
- maintenance categories

## B) Blueprint or Whiteprint Reading:

- definition
- use of drawings or prints
- types of prints
- users of prints
- specifications
- contracts
- scaling
- types, of views
- section views and names
- detail view
- mechanical/electrical/heating and ventilating view
- survey and plot plan views

## C) Specifications:

- definition
- purpose
- inclusive and explanation
- contract
- synopsis
- general conditions
- schedule
- special provisions
- substitute items
- inspections

## Topics and Descriptions (cont'd)

# D) Basic Electrical Systems:

- uses of electricity
- measuring energy ampere, volt, watt, kilowatt hour, ohm
- common resistors
- Ohm's Law and Application
- determination of: current, power, and kwh
- purchasing electrical energy
- reading meters
- demand meters
- rate schedules
- typical problems
- fuses and circuit breakers
- advantages
- wires sizes and insulations
- lighting foot candle and lumens
- emergency lighting
- generators requirement and use

# $\mathbb{E}$ ) Ventilation - Refrigeration - Air Conditioning:

- definitions
- ventilation code requirements
  - air changes
  - methods of measurement
- filters
- refrigeration types
  - advantages and disadvantages
  - cycles
  - evaporator
  - compressor
  - condensor
  - valves
  - refrigerants expansion of each
- air conditioning types
  - relative humidity
  - expansion of types
  - advantages and disadvantages
  - load
  - factors affecting heat load
  - solar effects reduction
  - system maintenance

#### F) Project:

Design and draw one of the following:

- (1) restaurant dining room
- (2) hotel suite
- (3) restaurant kitchen

#### G) Structural Maintenance:

- materials of wall construction
- maintenance of internal walls
- maintenance of doors
- maintenance of windows and screens
- roofing materials
- roofing terms

## H) Paint and Painting:

- requirements of a paint/decorating program
- paint selection
- types of paints and their uses
- surface preparation prior to painting
- cause of paint failures

# I) Landscaping:

- -"factors to consider when planning a new landscaping program
- landscaping maintenance program

#### SUGGESTED SUPPLEMENTAL READING:

- 1. "Interior Book of Hotels and Motor Hotels", Henry, End
- 2. "Modern Hotel Management", Gerald Lattin
- 3. "Modern Hotel Management Methods", Herbert K. Whitsky
- 4. "Personnel Management in Hotels and Restaurants", Donald Lundberg
- 5. "Your Future in Hotel Management", Roger P. Sonnaherd