



UNIVERSIDAD LIBRE®

Personería Jurídica No. 192 de 1946 de Mingobierno
Nit.: 860.013.798-5



FREE UNIVERSITY PEREIRA SECTION

UNDERGRADUATE PROGRAM IN ENVIRONMENTAL ENGINEERING



SUBJECT: ATMOSPHERIC POLLUTION I

CODE: -----

SEMESTER: SEVENTH

HOURS WEEKLY: 4

THEORETICAL: 4

PRACTICES: 0

REQUIREMENTS: FLUID MECHANICS II, STATISTICS II

GOALS.

- That the student is able to identify and evaluate the causes of the air pollution.
- That the student is able to interpret the existing regulations and propose solutions to bring pollutant values to permitted levels.
- That the student is able to calculate the collection efficiency for a given distribution of particles and to propose and design the most suitable system





UNIVERSIDAD LIBRE®

Personería Jurídica No. 192 de 1946 de Mingobierno
Nit.: 860.013.798-5



METHODOLOGY.

The course will be developed with master lectures by the professor on the content basics of the subject; for their part, students will strengthen their knowledge of the subject through recommended readings, consultations with the teacher and problem solving of application.

WORK PROGRAM.



1. EFFECTS AND SOURCES OF AIR POLLUTANTS

2. ENVIRONMENTAL LEGISLATION

- Law 99 of 1993
- Decree 948 of 1995
- Decrees 02 of 1982 and 2206 of 1983

3. METEOROLOGY

4. DISPERSION OF POLLUTANTS IN THE ATMOSPHERE





UNIVERSIDAD LIBRE®

Personería Jurídica No. 192 de 1946 de Mingobierno
Nit.: 860.013.798-5



5. PARTICLES

6. INDUSTRIAL PROCESSES: IDENTIFICATION, EVALUATION AND CONTROL OF EMISSIONS OF PARTICULATE MATERIAL

LITERATURE.

PRESIDENCY OF THE REPUBLIC OF COLOMBIA, Decree 948 of 1995

ALMA FOUNDATION, Health Provisions on Air Pollution, Decree 02 of 1982, Decree 2206 of 1983

WARK K., WARNER CF, Air Pollution, Origin and Control, LIMUSA, Noriega Editors

BRENER G., Air in Danger, Editorial Alhambra SA

DE LORA F., MIRO J., Environmental defense techniques, Editorial Labor SA, Barcelona, Spain

SANCHEZ E., URIBE E., Industrial Pollution in Colombia, DNP, UNDP

ESCOBAR ELMER, Information on Air Pollution Control, Seminars

Environmental Ecology, Air and Life, Air and Airspace, Bogotá, 1985

MINISTRY OF THE ENVIRONMENT, Fundamentals of Air Pollution, Course reports, Santafé de Bogotá, 1996





UNIVERSIDAD LIBRE®

Personería Jurídica No. 192 de 1946 de Mingobierno
Nit.: 860.013.798-5



 **CAMINANDO EN LA EXCELENCIA**



www.unilibre.edu.co/pereira

Pereira, campus Universitario Belmonte - Av. Las Américas carrera 28 No. 96-102. Sede Centro, calle 40 No. 7-30. Sede Comité de Cafeteros Cra. 9a. 36-43.
PBX: (6)3401081 - 3401043