

DIM-MESEM-511 Air pollution and treatment

Syllabus

Chapter 1: Air quality regulations

- 1.1 Community, state, regional and local legislation.
- 1.2 Scope of legislation.
- 1.3 Current emission, inmission and quality standards.

Chapter 2: Air pollution

- 2.1 Primary and secondary pollutants: Origin, effects and consequences.
- 2.2 Evolution of tropospheric pollution: Chemistry and photochemical of pollutants.
- 2.3 Dispersion of air pollution.
- 2.4 Industrial pollution approaches: Examples and case studies.

Chapter 3: Air decontamination

- 3.1 Industrial decontamination processes and elements..
- 3.2 Outdoor air quality
- 3.3 Indoor air quality

Chapter 4: Measurement of air pollution

- 4.1 Elements and measuring stations.
- 4.2 Monitoring and prediction of pollution.

Chapter 5: Climate change and decarbonization

- 5.1 Climate change: Causes, consequences, current state and adaptation measures.
- 5.2 Global targets for climate change mitigation and adaptation.
- 5.3 Decarbonization of the economy: Decarbonization strategies and real cases.