OBJECTIVES:
This subject aims to train students to integrate the principles of prevention into medical practice and to view health problems from a social and community perspective.

GENERAL OBJECTIVES
1- Train students in the application of care methods currently used in preventive medicine
2- Provide students with a view of healthcare that focuses on current priorities in public health and social medicine

SPECIFIC OBJECTIVES
- Define the concepts of Preventive Medicine, Public Health and Community Health
- Describe their respective characteristics and functions
- Present socio-economic measures in public health
- Describe the periods in the natural history of disease
- Explain the characteristics of the different levels of prevention
- Apply epidemiological methods to clinical practice
- Review the most common epidemiological designs in the clinical environment
- Describe the various components of health education
- Describe the methods used in health education
- Explain the role of the doctor in health education
- Assess the importance of medical advice
- Review the concepts that determine the effectiveness of screening for certain diseases
- Know the selection criteria linked to screened diseases
- Describe the possible biases of a screening program
- Know the scientific and operative basis of vaccinations
- Explain the systematic and non-systematic guidelines for vaccination
- Assess the importance of vaccination in special clinical situations
- Present the procedures for chemoprophylaxis and chemoprevention
- Assess the possibilities offered by preventive medicine in medical practice
- Describe monitoring methods in public health
- Present the principal sources of information in public health
- Define quality of life with regard to health
- Describe the instruments for measuring quality of life
- Establish the stages involved in air pollution
- Explain the phenomenon of thermal inversion
- Describe the harmful effects of pollution on health
- Define the quality of healthy water
- Interpret the results of microbiological control of water
- Describe the stages in drinking water purification
- Describe the methods used in the chlorination of water
- Define the concept of biochemical oxygen demand
- Describe the systems for collection of solid waste
- Explain the composting method
3. PROGRAMME

BLOCK 1: BASIC CONCEPTS
Topic 1. Concept of Preventive Medicine, Public Health and Community Health
Topic 2. Concept and field of Clinical Epidemiology
Topic 3. Natural History of Disease Levels of Prevention

BLOCK 2: METHODS OF CLINICAL PREVENTION
Topic 4. Health Education Concept and Scientific Basis
Topic 5. Health Education. Methods and Applications
Topic 6. Health Education. Medical Advice
Topic 7. Screening. Concept and Criteria of contributory diseases
Topic 8. Screening. Assessment of Programs or Interventions
Topic 9. Vaccinations. Classification and Immune Basis
Topic 10. Vaccinations: Side Effects, Contraindications, Practical Aspects
Topic 11. Systematic Vaccinations. Vaccination Calendar
Topic 12. Vaccinations in Adults
Topic 13. Vaccinations. Administrative Guides. Special Clinical Situations
Topic 14. Chemoprophylaxis and Chemoprevention

BLOCK 3: HEALTH PROTECTION
Topic 15. Air Pollution
Topic 16. Health impact of water
Topic 17. Monitoring water quality
Preventive medicine, public health and community health

Topic 18. Solid waste
Topic 19. Monitoring food quality
Topic 20. Sterilization and disinfection procedures. Other sanitation techniques

BLOCK 4: HEALTH PROTECTION

4.1 TRANSMISSIBLE DISEASES
Topic 21. Epidemiological model of transmissible diseases
Topic 22. Basis of Prevention of Transmissible Diseases
Topic 23. Epidemiology and Prevention of Tuberculosis
Topic 24. Epidemiology and Prevention of Meningococcal Disease
Topic 25. Epidemiology and Prevention of Viral Hepatitis
Topic 26. Epidemiology and Prevention of STDs
Topic 27. Epidemiology and Prevention and HIV infection and AIDS
Topic 28. Epidemiology and Prevention of Food Poisoning
Topic 29. Epidemiology and Prevention of Imported Diseases. Travel Health
Topic 30. Epidemiology and Prevention of Nosocomial Infections

4.2 CHRONIC DISEASES
Topic 31. Cardiovascular Diseases. Epidemiology and Prevention
Topic 32. Arterial Hypertension. Epidemiology and Prevention
Topic 33. Cancer. Epidemiology and Prevention
Topic 34. Endocrine and Metabolic Diseases. Epidemiology and Prevention
Topic 35. Osteoarticular Diseases. Epidemiology and Prevention
Topic 36. Oral Health. Epidemiology and Prevention
Topic 37. Mental Health. Epidemiology and Prevention
Topic 38. Food-related behavioral disorders. Epidemiology and Prevention
Topic 39. COPD. Epidemiology and Prevention
Topic 40. Accidents. Epidemiology and Prevention

BLOCK 5 : PUBLIC HEALTH PROGRAMS
Topic 41. Diet and Public Health. Community Nutrition
Topic 42. Tobacco and Health
Topic 43. Alcohol and Health
Topic 44. Drug addictions
Topic 45. Physical activity and Health
Topic 46. Occupational Health
Topic 47. Maternal and Child Health and Adolescent Health
Topic 48. Adult Health and Elderly Health

BLOCK 6 : SOCIAL MEDICINE
Topic 49. Epidemiological Monitoring and Health Information Systems
Topic 50. Measures of quality of life in medical care
Topic 51. Healthcare and Social Policy
Topic 52. Health Plan for Catalonia
Topic 53. Social inequality in healthcare
Topic 54. Healthcare professionals and Social Medicine
Topic 55. Patient-Client and Social Medicine
PRACTICAL CREDITS

PRACTICAL CLINICAL TRAINING (2 credits)
Each practical group (made up of 5-6 students) will take part in the care activities (health advice, vaccination programs and control of contacts) carried out in the Preventive Medicine Service of the Unit for Support and Prevention at the Hospital Clinic Universitari in Barcelona.

5. TEACHING METHODOLOGIES
Theory classes
Seminars
Practical Clinical Training
Solving clinical cases
Videographic session
Tutorials