



## **THE METHODOLOGY OF SCIENCES**

### ◆ **UNIT 1** INTRODUCTION

The historical background and context. Philosophy and the study of knowledge. Science and knowledge. Epistemology. Some key concepts in the sciences: theory – law – hypothesis – variables. Case studies and examples.

### ◆ **UNIT 2** THE SCIENCES AND THE SCIENTIFIC METHOD

Classification of science and methods. Sciences and the scientific method. Research and the investigative approach in the different sciences. Experimental design in science. Cases and examples.

### ◆ **UNIT 3** THE RESEARCH

The process of the research. Formulating problems. Planning a research. The use of bibliography: techniques. Collection, analysis and interpretation of data.

### ◆ **UNIT 4** THE REPORT AND THE EXTENDED ESSAY

The report and the extended essay: presentation techniques. Types of reports and reviews. Extended essays: approach and techniques.