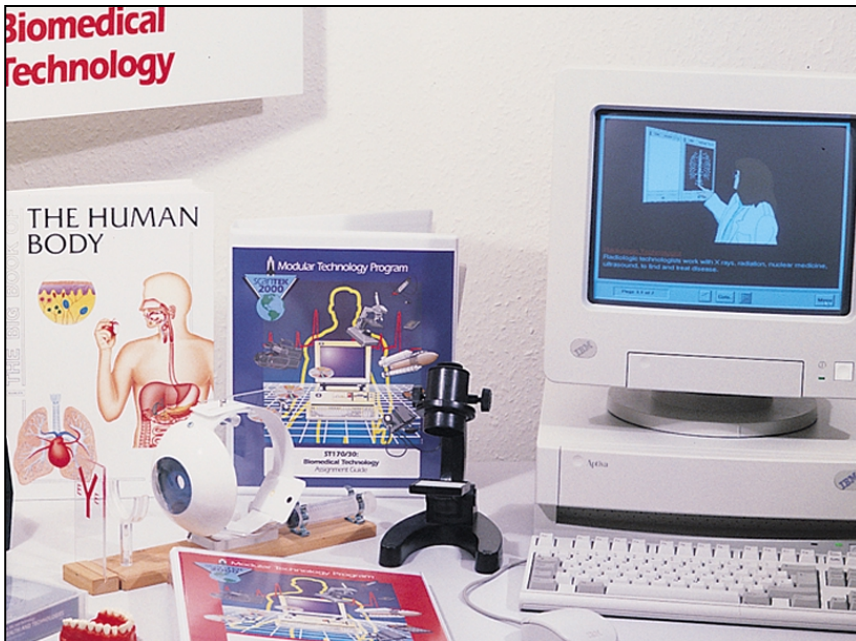


Biomedical Technology (10-assignment)



This is an integrated instructional module designed specifically to operate within a Modular Program environment. It is ideal for use with our Scantek Technology program. The module includes a 10-assignment exploratory curriculum that is split into two parts. Each part includes a pre-test and post test. The module includes hardware, software and curriculum materials sufficient to provide a complete learning experience.

The curriculum incorporates continuous assessment through questions. When used in conjunction with a ClassAct networked management system, this provides instant feedback of student performance. The assessments begin with a comprehensive pre-test. This quiz includes questions for each subsequent assignment, together with questions that will specifically test math and reading ability.

Every assignment starts with a series of questions designed to track inventory. These ensure that any missing items are located before they are needed.

Each assignment is divided into a series of tasks. Hands-on tasks form the core of the student work. Where appropriate, these are accompanied by research tasks based upon software applications. Assessment questions are incorporated into each task.

Typical 10-assignment topic areas include:

- Child growth charts
- Investigating the human body using 3D model software
- Clinical tests to analyse artificial blood and urine

Typical 10-assignment topic areas include (continued):

- Teeth casting
- Reading and recording vital signs of life
- Human body systems and organs
- Optical function and lens correction
- Body temperature and respiration
- Dialysis and kidney transplants
- Ambulance and paramedic services
- Physicians occupations

Typical 10-assignment activities include:

- Explore the use of simple technology to highlight growth patterns.
- Study the effect of diseases on weight changes on growth charts and how to overcome weight loss caused by diseases.
- Use a simple microscope to study healthy and damaged cells as a way to diagnose disease at a cellular level.
- Explore careers in the medical profession.
- Use a software package to study the human body in 3 dimensions.
- Build a 2 dimensional model to show the various sizes and positions of the major organs in the human body.
- Investigate optical illusions and the relationship between the brain and eye.
- Use software to find out about the brain.
- Identify the vital signs of life as a way to assess health or illness.
- Measure temperature, pulse and respiration.
- Explore methods used to read and record the vital signs of life.
- Use clinical tests to analyze artificial blood and urine samples.
- Explore biomedical materials by making a dentist's model cast of teeth.
- Watch a video about the range of technologies used in the medical field.
- Find out about more careers in the medical field such as paramedics, ambulance services or physicians.

Each assignment is designed around a list of performance objectives. These lists include academic, technical and occupational objectives. The assignments are written in such a way as to enable a student to attain the performance objectives, with the assessment questions linked to these in order to provide a measure of true competency.

The performance objectives are used by the ClassAct management system to generate a comprehensive portfolio of student competency reports. Default reports supplied with this module include:

- Entry report
- Technical/Occupational Exit report
- Basic Skills report based upon the federal SCAN's report.

The items supplied with this instructional module include:

- 10-assignment On-Screen Student Assignment Guide CD
- 10-assignment Student Assignment Guide
- 10-assignment Student Workbook
- 10-assignment Instructor's Guide
- Computer Aided Instruction software
- Cells and the Brain Fact File sheet
- Software: The Ultimate Human Body
- Video: 'Health and Technologies'
- Model Eye
- Lamp
- Bioviewer
- Pack of Acetate Sheets
- Carton Alginate Powder
- Carton Plaster of Paris
- Beakers
- Drug Abuse Bioset
- Nutrition Bioset
- Laboratory Samples Testing Kit
- Accessory kit

Additional items required:

- Computer

Module Facts

For Technology Program, order as: ST170/10 Biomedical Technology

	No.	Average time
Assignments	10	45 minutes
Extension Activities	2	45 minutes
Total		9 hours



LJ Technical Systems
 Web site: www.ljgroup.com