THE ART OF WEB-BASED LEARNING

Past Achievements

Present Objectives

Future Strategies

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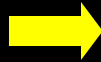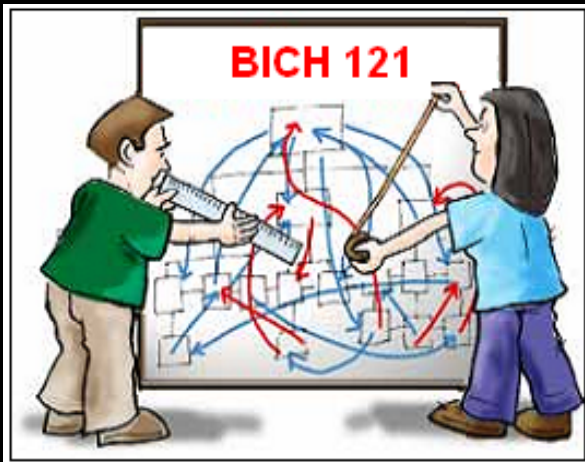
OBJECTIVES OF WEB-BASED LEARNING
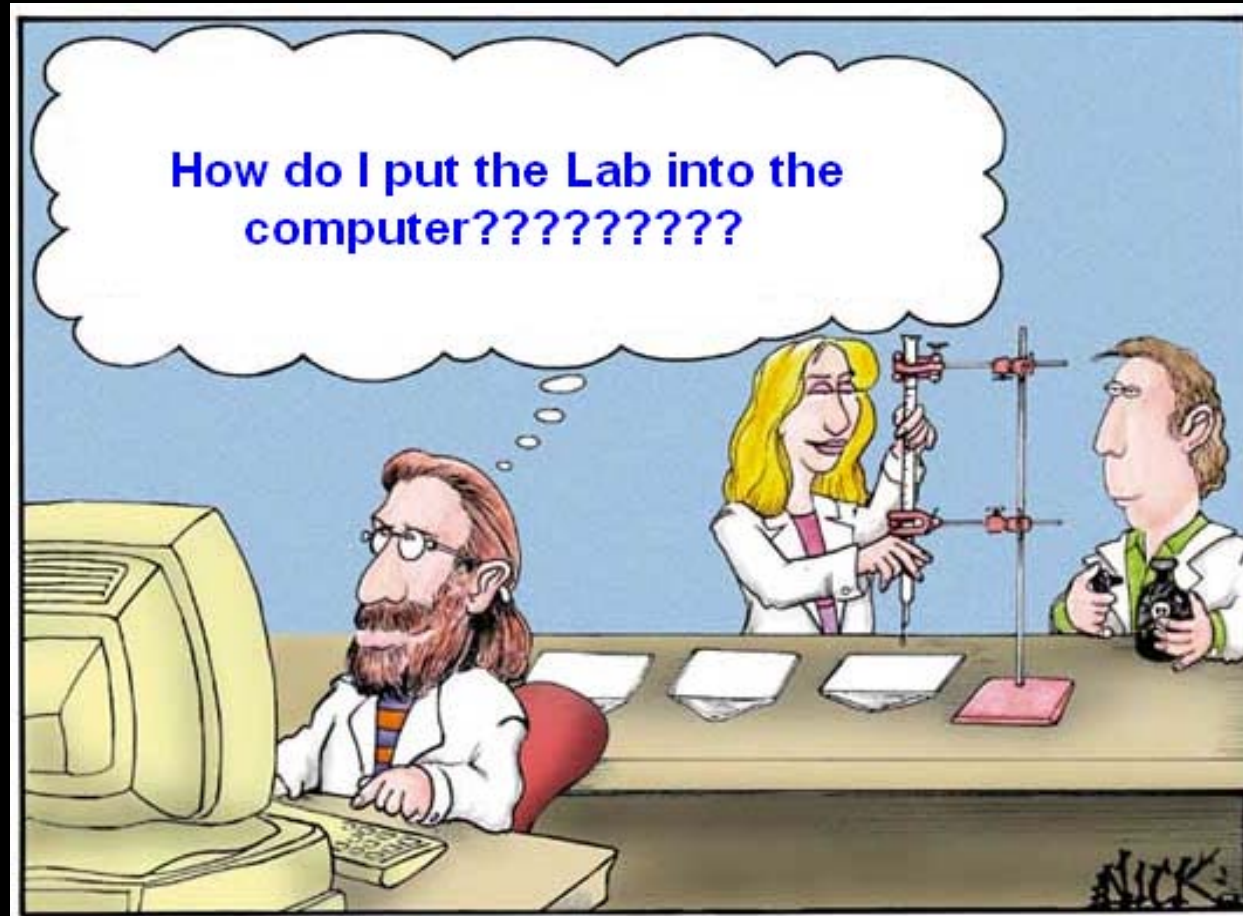
WEB-BASED TEACHING/LEARNING

- **Enhancement of Knowledge Delivery**
- **Reinforcement of Conceptual Understanding**
- **Instigation of Active Learning**
- **Fortification of Macroscopic Overview of Concepts**
- **Facilitation of Communication Channeling**

STEPS IN WEB-BASED DEVELOPMENT
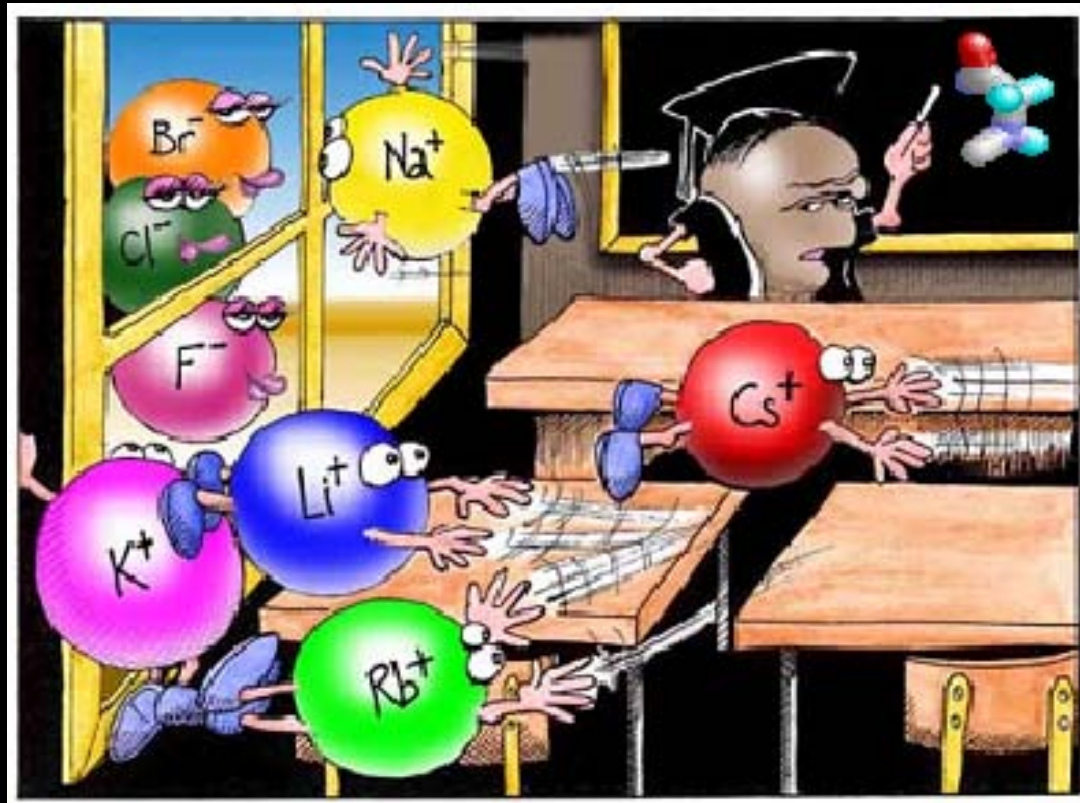
BIOCHEMICAL DISCIPLINES

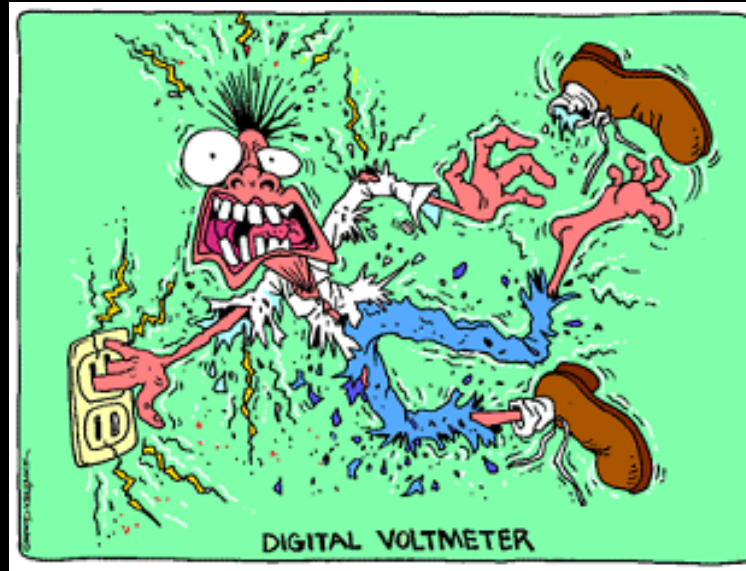**Biochemical Laboratory Techniques
(BICH 172/182)**

BIOCHEMICAL DISCIPLINES

**Intermediary Metabolism
(BICH 122)**

BIOCHEMICAL DISCIPLINES

Introduction to Biochemistry
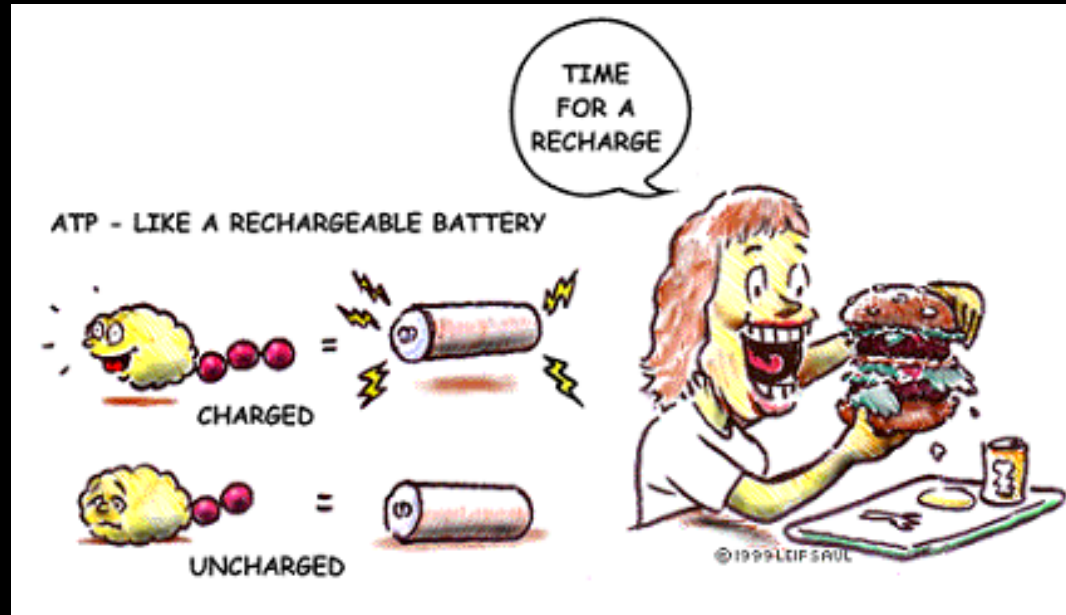(BICH 121)

BICH 172/182

DIGITAL VOLTMETER

Objectives

•Conceptual Learning
•Reflective Thinking

Approaches

•Development of animation series on biochemical methods
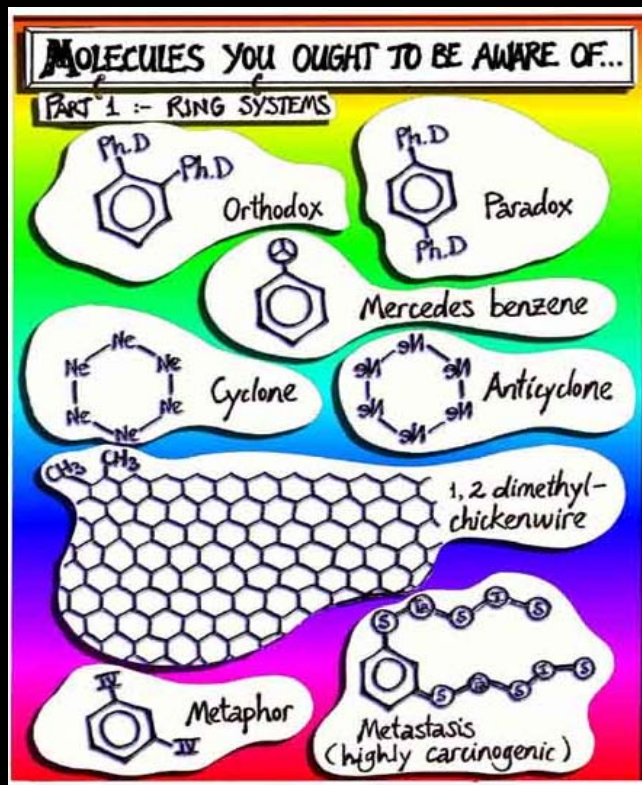•Highlight availability of online resources on interactive tutorials

BICH 122

Objectives
- Integrative Learning
- Reciprocal Learning

Approaches

- Construction of Interactive Metabolic Pathways
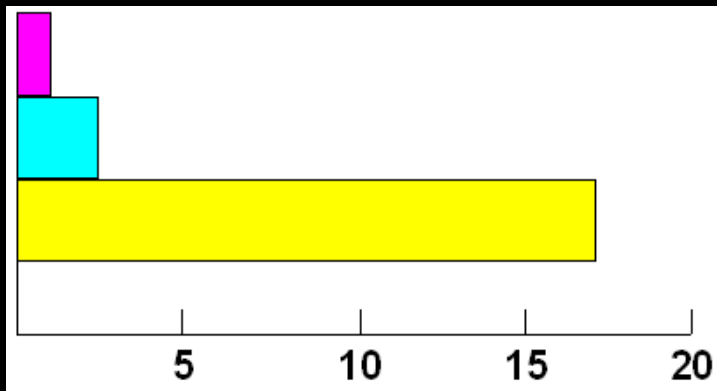- Development of Interactive Assessments

BICH 121

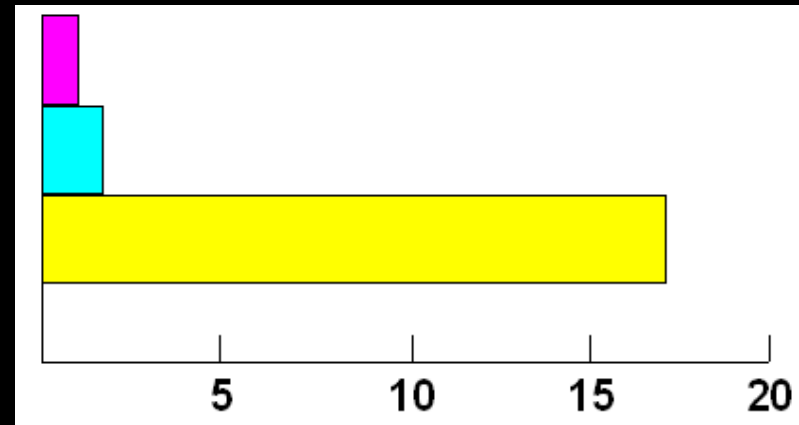**Objectives**

•Perceptual Learning

Approaches

•Use of multi-mediated learning aids for knowledge reinforcement

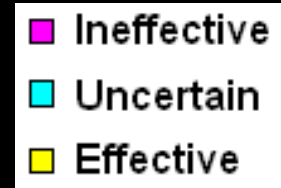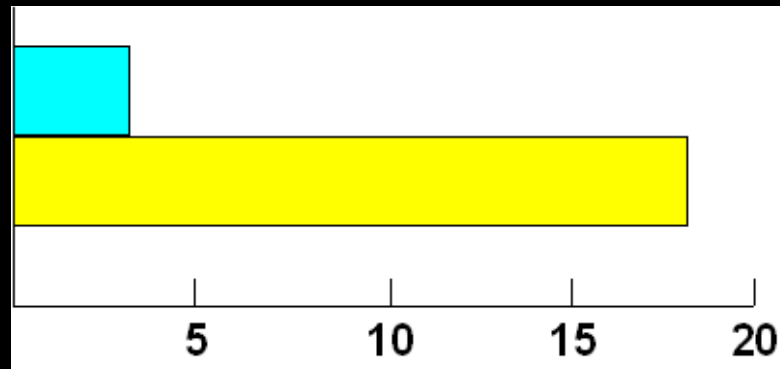http://ctz106.ust.hk/test/bich121/1_protein_03.swf

PRELIMINARY EVALUATION

Effectiveness of WEBCT in communication

Effectiveness of animations on conceptual understanding

Overall effectiveness of WEBCT 172/182
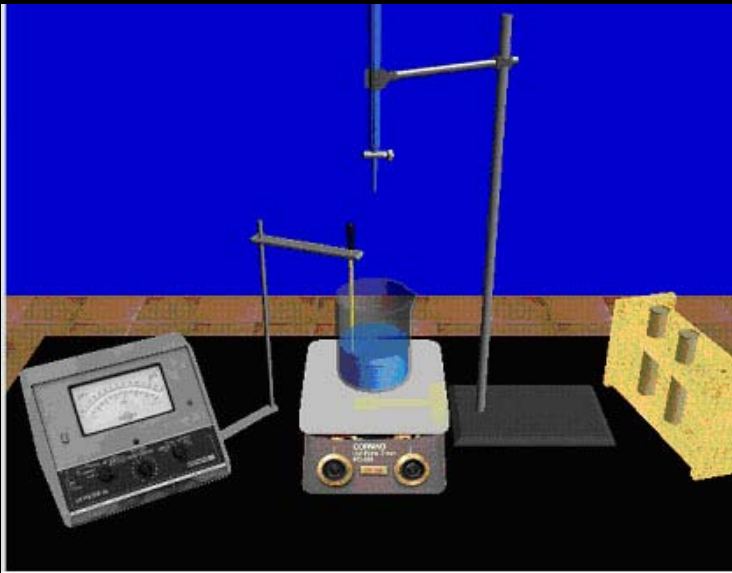
- Ineffective
- Uncertain
- Effective

FUTURE DIRECTIONS

Development of Virtual Laboratory

Promotion of Online Discussion Forum