FACULTY OF BUSINESS ADMINISTRATION
SECOND SEMESTER 1995/96
COURSE OUTLINE

Course Title: BUSINESS COMPUTER APPLICATIONS, CBIS 110
Lecturer: Duarte Trigueiros
Office: T210
Office Hours: Tue   10.30-12am
                 Fri   10.30-12am

Objective: To provide basic concepts and terminology related to computing, bearing in mind the role of information as a resource of the firm: hardware and software, flowcharting and programming, IO, along with elementary networking and database concepts. System analysis and design, along with data collecting and processing, are also studied.

Course Outline:

Organizations. The firm as a system
The added-value process. Support activities.

Information as a resource of the firm.
Information as a link between activities. Transactions.
Batch and Transaction processing.

From Data to Information.
Sensitive aspects when processing data.
The value of information.

Data organization. File organization.
Data access. Sequential, Direct, Indexed.
Secondary storage. Tapes and Disks. Characteristics.

Data communication. Local and Wide Area Networks.
Networks, workgroups and management.

The Systems Analyst. How a Systems Analyst works.
The programming process.
Languages, levels, structur. Chosing a language.
Fortran and Basic.Cobol and Pascal.
Object-oriented programming. C.
Programming, Decision Support Systems, flexibility.

Operating Systems.
Sharing resources.

Decision levels inside the firm. The support required in each case.
Decision Support Systems.
Spreadsheets.
Office Database Packages.
Computer Graphics.
Workflow Management environments.

Automation and the value-added process.
Artificial Intelligence and Expert Systems.
Robotics.

Security, privacy and ethics.

Evaluation: Mid-Term test: 40%
                  Final Exam: 40%
                  Other: 10%

Recommended Bibliography:

"Computers and Information Systems, Tools for an Information Age", Third Edition, by Capron, H., and Perron, J., The Benjamin/Cunnings Publishing Company.