# COURSE TOPICAL BIBLIOGRAPHY

Management Information Systems is a broad multifaceted discipline. In order to provide some structure for examining the research being conducted within the field the research has been classified into five broad categories; design, management and organization, hardware and software, evaluation and other. The following eighteen subcategories have been identified within these categories:

### MIS RESEARCH TOPICS

### I. DESIGN

- 1. <u>Information Requirements Analysis</u>: Definition of user requirements via interviews, observation, prototyping, and documentation of existing system.
- 2. Application Systems Implementation: All phases of getting a system in place, not just the implementation/conversion phase of the development lifecycle.
- 3. Structured Design Techniques: Information Algebra, SOP, ADS, ISDOS, TAG, etc.
- 4. <u>User-System Interface</u>: Focus on man machine interace, human engineering, e.g. dataentry/output, color-graphics, natural language, inquiry, menus of report options, etc.

# II. MANAGEMENT & ORGANIZATION

- 5. Computing Operations Management: DP Management, use of performance monitors, operations personnel, "production" focus.
- 6. MIS Management: Administration of MIS function, project management.
- 7. Data Management: Data Base Administration, library functions, etc.
- 8. Impact of Computer Technology on Organizations: Impact on structure of organizations, on jobs, sociotechnical issues.

### III. HARDWARE/SOFTWARE

- 9. Distributed Systems: Hardware, software, management
- 10. Software Engineering: Software documentation, structured programming, proof of programs, efficiency of programs, high level macros.
- 11. Computer Languages: Compilers, assemblers, translators and languages.
- 12. Telecommunications: Digital-analog conversion, transmission over a mile, networking, error rates in lines, etc.

#### IV. EVALUATION

- 13. Value of Information/Information Systems: Cost/Benefit analysis, value of information, for humans value of systems for organizations, econometrics, chargeback, etc.
- 14. Auditing of Systems: In a broader sense than in accounting, data integrity, systems integrity, quality control, etc.,
- V. OTHER
- 15. Computers and the Law: Legislation and laws, court cases, antitrust, etc.
- 16. The Computer Industry: History, manufacturers, software houses, etc.
- 17. Decision-Making: DSS, Human cognitive factors, mental processing, etc.
- 18. General: All other general research issues.