

Brooklyn College
Department of Computer & Information Sciences

CISC 7500X [757X] Introduction to Management Information Systems

37½ hours plus conference and independent work; 3 credits

Synopsis:

CISC 7500 is tactical in nature and focuses on internal Information Technology (IT) management issues. The course focuses on the business and technical value of the various IT components and methodologies to select and evaluate alternative options. Students learn how to make intelligent choices and how to justify their recommendations. It is not intended to teach these sub-disciplines.

All lectures relate the subject matter to case studies, real-life situations and/or student experiences. In addition, students are required to prepare at least two formal case studies, which are discussed and dissected in class.

Required Text:

1. Managing Information Technology
Carol V Brown, Daniel W. DeHayes, Jeffrey A. Hoffer, E. Wainright Martin,
William C Perkins

Seventh Edition, 2012, Prentice Hall

ISBN - 978-0-13-214632-6

Topics:

1. Course synopsis; differences between 7500, 7532, and 7534; expectations, reading material to be covered, student survey and grading structure
2. Basic concepts, enabling role of information technology (IT), information systems and work systems, eight elements of work system framework and methodology
3. Computer hardware – cost/performance analyses, technology performance from a business perspective, raw power vs. practical use, new forms of input and output .
4. Software, programming and Artificial Intelligence (AI) – analysis of overhead and total costs, selection of appropriate “tools” for different project classes – methodologies, types of software, roles for AI tools including pros/cons/examples/relative costs for expert systems, neural networks, fuzzy logic, case-based reasoning, intelligent agents and natural language processing

5. Information and databases, database management, data modeling, general modeling, normalization, evaluation and selection of alternative schema, creation of information, text databases and hypertext
6. Telecommunications and Networking – types of networks, functions and components, convergence of computing and communications, standards and policy, evaluative criteria and tradeoffs, security issues, cost/performance analyses, intranet/internet impact on traditional roles/costs/values
7. Operations management – evolution of traditional roles, focus on expanded impact on telecommunications internal and external to the organization, security, base for new technology trials, front line for IT interface to all users, dynamics of supporting diffused infrastructure, authority/responsibility mismatches, automation of functions/“lights out” data centers, disaster recovery, levels of outsourcing – how to define/select/manage, vendor partnership evaluation, development and assessment
8. Inter-organizational systems – methodologies for evaluation/selection/assessment including traditional systems, electronic commerce, EDI, Internet, strategic linkages
9. Building and maintaining information systems, concepts and alternatives, pros and cons, assessment methodologies ---
 - a. Development by IT - SDLC, prototyping, maintenance, new and hybrid approaches
 - b. Purchasing systems – make vs. buy, differences in project management
 - c. Systems development by users – methodologies, strategies and tactics
 - d. Hybrid approaches
10. In-depth case study discussions – minimum of two (representative listing, other cases may be substituted)
 - a. Batesville Casket
 - b. Consumer and Industrial Products
 - c. Southwest University
 - d. Jefferson County
 - e. IMT Custom Machine Company
 - f. Midstate University
 - g. Methodist Hospital
 - h. Grandma Studor’s Bakery

Exams:

1. Periodic unannounced quizzes and/or collected homework
2. Midterm and final exams may include case studies requiring application of material to real-life situations, ability to “communicate” in writing and capability to defend position (i.e. there is no “cookbook” right answer) in addition to short essay questions requiring exposition of concepts covered throughout term and/or multiple choice/fill-in type questions

3. Case studies assigned throughout the term will comprise a significant portion of the final term grade.