

> Intended Audience

Introduction to Systems Analysis and Design is intended to support a first course in information systems development for information systems majors and other business majors.

We recommend that students take a computer or information systems literacy course before using this text. *Introduction to Systems Analysis and Design* does not assume students have taken a programming course, although some knowledge of programming can significantly enhance the learning experience provided by this textbook.

> The Need for This Book

Systems Analysis and Design Methods, 7e is the most widely-adopted textbook on the subject. It continues to be the book of choice for those faculty teaching a comprehensive systems analysis and design course with a balanced coverage of systems concepts, tools, and techniques.

Introduction to Systems Analysis and Design will meet the needs of the many faculty and students who have told us over the years that they want a complete, but more concise text with just enough emphasis on systems concepts.

> Pedagogical Use of Color

The book uses color applied to an adaptation of Zachman's *Framework for Information Systems Architecture*. The color mappings are displayed in the inside front cover of the textbook.

The information systems building blocks matrix uses these colors to introduce recurring concepts. System models then reinforce those concepts with a consistent use of the same colors.

> Organization

Introduction to Systems Analysis and Design is divided into four parts. The text's organization is flexible enough to allow instructors to omit and resequence chapters according to what they feel is important to their audience. Every effort has been made to decouple chapters from one another as much as possible to assist in resequencing the material—even to the extent of reintroducing selected concepts and terminology.

Part One, "The Context of Systems Development Projects," presents the information systems development scenario and process. Chapters 1 through 3 introduce the student to systems analysts, other project team members (including users and management), information systems building blocks (based on the Zachman framework), a contemporary systems development life cycle, and project management. Part One can be covered relatively quickly. Some readers may prefer to omit project management or delay it until the end of the book.

Part Two, "Systems Analysis Methods," covers the front-end life-cycle activities, tools, and techniques for analyzing business problems, specifying business requirements for an information system, and proposing a business and system solution. Coverage in Chapters 4 through 10 includes requirements gathering, use cases, data modeling with entity-relationship diagrams, process modeling with data flow diagrams, object-oriented analysis, and solution identification and the system proposal.

Part Three, "Systems Design Methods," covers the middle life-cycle activities, tools, and techniques. Chapters 11 through 17 include coverage of both general and detailed design, with a particular emphasis on application architecture, rapid development and prototyping, external design (inputs, outputs, and interfaces), internal design (e.g., database and software engineering), and object-oriented design.

Information Systems Framework

Color is used consistently throughout the text's framework to introduce recurring concepts.



represents methods



represents data and/or knowledge



represents process



represents communication/interface



represents people

Part Four, “Beyond Systems Analysis and Design,” is a capstone unit that places systems analysis and design into perspective by surveying the back-end life-cycle activities. Specifically, Chapter 18 examines systems construction and implementation.

> **Supplements and Instructional Resources**

It has always been our intent to provide a complete course, not just a textbook. We are especially excited about this book's comprehensive support package. It includes Web-hosted support, software bundles, and other resources for both the student and the instructor. The supplements for Introduction to Systems Analysis and Design include the following components.

Web Site/OLC

A completely redesigned Web site provides easy-to-find resources for instructors and students.

For the Instructor

Web Site/OLC

The book's Web site at www.mhhe.com/whitten provides resources for instructors and students using the text. The Online Learning Center (OLC) builds on the book's pedagogy and features with self-assessment quizzes, extra material not found in the text, Web links, and other resources. The instructor side of the site offers a *secure* location for downloading the latest supplemental resources.

Instructor's Manual with PowerPoint Presentations

The instructor's manual is offered on the *Instructor's CD-ROM*, as well as on the book's Web site. This manual includes course planning materials, teaching guidelines and PowerPoint slides, templates, and answers to end-of-chapter problems, exercises, and minicases.

The PowerPoint presentations on the CD-ROM include over 400 slides. All slides are complete with instructor notes that provide teaching guidelines and tips. Instructors can (1) pick and choose the slides they wish to use, (2) customize slides to their own preferences, and (3) add new slides. Slides can be organized into electronic presentations or be printed as transparencies or transparency masters.

Test Bank

The *Instructor's CD-ROM* also includes an electronic test bank covering all the chapters. Computerized/Network Testing with Brownstone Diploma software is fully networkable for LAN test administration. Each chapter offers questions in the following formats: true/false, multiple choice, sentence completion, and matching. The test bank and answers are cross-referenced to the page numbers in the textbook. Each question is assigned a level of difficulty and followed by the chapter learning objective that it addresses.

> Packages

System Architect Student Edition Version 8

An optional package combines the textbook, Student Resource CD, and a student version of System Architect. System Architect is a powerful, repository-based enterprise modeling tool which supports a comprehensive set of diagramming techniques and features, including all nine UML diagram types, business enterprise modeling, data modeling, business modeling with IDEFO and IDEF3 notations, plus many more.

Visible Analyst Workbench

Another optional package combines the textbook, Student Resource CD, and Visible Analyst Workbench. This tool integrates business function analysis, data modeling and database design, process modeling, and object modeling in one easy-to-use package. Print versions of each case can be ordered through McGraw-Hill's Custom Publishing group by visiting www.primiscontentcenter.com. A *build your own project* model is retained for instructors and students who want to maximize value by leveraging students' past and current work experience or for use with a live-client project.



Primis Content Center

Primis Online

Print versions of projects and cases, as well as other MIS content, can be ordered through McGraw-Hill's Custom Publishing Group.