



ARIZONA STATE UNIVERSITY
GENERAL STUDIES COURSE PROPOSAL COVER FORM

Course information:

Copy and paste current course information from Class Search/Course Catalog.

Academic Unit	<u>W. P. Carey School of Business</u>	Department	<u>Information Systems</u>
		<u>Computer Applications and Information</u>	
Subject	<u>CIS</u>	Number	<u>105</u>
		Title	<u>Technology</u>
			Units: <u>3</u>
Is this a cross-listed course? If yes, please identify course(s)	<u>No</u>		
Is this a shared course? Course description:	<u>No</u>	If so, list all academic units offering this course _____	

Requested designation: Mathematical Studies-CS
Note- a separate proposal is required for each designation requested

Eligibility:
 Permanent numbered courses must have completed the university's review and approval process.
 For the rules governing approval of omnibus courses, contact the General Studies Program Office at (480) 965-0739.

Area(s) proposed course will serve:
 A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

- Checklists for general studies designations:**
 Complete and attach the appropriate checklist
- Literacy and Critical Inquiry core courses (L)
 - Mathematics core courses (MA)
 - Computer/statistics/quantitative applications core courses (CS)
 - Humanities, Fine Arts and Design core courses (HU)
 - Social and Behavioral Sciences core courses (SB)
 - Natural Sciences core courses (SQ/SG)
 - Global Awareness courses (G)
 - Historical Awareness courses (H)
 - Cultural Diversity in the United States courses (C)

- A complete proposal should include:**
- Signed General Studies Program Course Proposal Cover Form
 - Criteria Checklist for the area
 - Course Syllabus
 - Table of Contents from the textbook and list of required readings/books

Contact information:

Name Angelina Saric Phone 5-4974

Mail code 4606 E-mail: angelina.saric@asu.edu

Department Chair/Director approval: (Required)

Chair/Director name (Typed): Michael Goul Date: 2/3/14

Chair/Director (Signature):

Arizona State University Criteria Checklist for

MATHEMATICAL STUDIES [CS]

Rationale and Objectives

The **Mathematical Studies** requirement is intended to ensure that students have skill in basic mathematics, can use mathematical analysis in their chosen fields, and can understand how computers can make mathematical analysis more powerful and efficient. The **Mathematical Studies** requirement is completed by satisfying both the **Mathematics [MA]** requirement and the **Computer/Statistics/Quantitative Applications [CS]** requirement explained below.

The **Mathematics [MA]** requirement, which ensures the acquisition of essential skill in basic mathematics, requires the student to complete a course in College Mathematics, College Algebra, or Precalculus, or demonstrate a higher level of skill by completing a mathematics course for which any of the first three courses in a prerequisite.

The **Computer/Statistics/Quantitative Applications [CS]** requirement, which ensures skill in real world problem solving and analysis, requires the student to complete a course that uses some combination of computers, statistics, and mathematics.

Approved: Feb. 2000

CIS 105 - Computer Applications and Information Technology

Proposer: Please complete the following section and attach appropriate documentation.

ASU--[CS] CRITERIA			
A COMPUTER/STATISTICS/QUANTITATIVE APPLICATIONS [CS] COURSE MUST SATISFY ONE OF THE FOLLOWING CRITERIA: 1, 2, OR 3			
YES	NO		Identify Documentation Submitted
		1. Computer applications*: courses must satisfy both a and b :	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Course involves the use of computer programming languages or software programs for quantitative analysis, modeling, simulation, animation, or statistics.	Course syllabus and table of contents for ebook and software
		b. Course requires students to analyze and implement procedures that are applicable to at least one of the following problem domains (check those applicable):	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	i. Spreadsheet analysis, systems analysis and design, and decision support systems.	Course syllabus and table of contents for ebook and software
<input type="checkbox"/>	<input type="checkbox"/>	ii. Graphic/artistic design using computers.	
<input type="checkbox"/>	<input type="checkbox"/>	iii. Music design using computer software.	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	iv. Modeling, making extensive use of computer simulation.	Course syllabus and table of contents for ebook and software
<input checked="" type="checkbox"/>	<input type="checkbox"/>	v. Statistics studies stressing the use of computer software.	Course syllabus and table of contents for ebook and software
<p>*The computer applications requirement cannot be satisfied by a course, the content of which is restricted primarily to word processing or report preparation skills; learning a computer language or a computer software package; or the study of the social impact of computers. Courses that emphasize the use of a computer software package or the learning of a computer programming language are acceptable, provided that students are required to understand, at an appropriate level, the theoretical principles embodied in the operation of the software and are required to construct, test, and implement procedures that use the software to accomplish tasks in the applicable problem domains.</p>			
		2. Statistical applications: courses must satisfy both a and b .	
<input type="checkbox"/>	<input type="checkbox"/>	a. Course has a minimum mathematical prerequisite of College Mathematics, College Algebra, or Precalculus, or a course already approved as satisfying the MA requirement.	
<input type="checkbox"/>	<input type="checkbox"/>	b. The course must be focused principally on developing knowledge in statistical inference and include coverage of all of the following:	

ASU--[CS] CRITERIA			
YES	NO		Identify Documentation Submitted
<input type="checkbox"/>	<input type="checkbox"/>	i. Design of a statistical study.	
<input type="checkbox"/>	<input type="checkbox"/>	ii. Summarization and interpretation of data.	
<input type="checkbox"/>	<input type="checkbox"/>	iii. Methods of sampling.	
<input type="checkbox"/>	<input type="checkbox"/>	iv. Standard probability models.	
<input type="checkbox"/>	<input type="checkbox"/>	v. Statistical estimation	
<input type="checkbox"/>	<input type="checkbox"/>	vi. Hypothesis testing.	
<input type="checkbox"/>	<input type="checkbox"/>	vii. Regression or correlation analysis.	
		3. Quantitative applications: courses must satisfy both a and b.	
<input type="checkbox"/>	<input type="checkbox"/>	a. Course has a minimum mathematical prerequisite of College Mathematics, College Algebra, or Precalculus, or a course already approved as satisfying the MA requirement.	
		b. The course must be focused principally on the use of mathematical models in quantitative analysis and design making. Examples of such models are:	
<input type="checkbox"/>	<input type="checkbox"/>	i. Linear programming.	
<input type="checkbox"/>	<input type="checkbox"/>	ii. Goal programming.	
<input type="checkbox"/>	<input type="checkbox"/>	iii. Integer programming.	

ASU--[CS] CRITERIA			
YES	NO		Identify Documentation Submitted
<input type="checkbox"/>	<input type="checkbox"/>	iv. Inventory models.	
<input type="checkbox"/>	<input type="checkbox"/>	v. Decision theory.	
<input type="checkbox"/>	<input type="checkbox"/>	vi. Simulation and Monte Carlo methods.	
<input type="checkbox"/>	<input type="checkbox"/>	vii. Other (explanation must be attached)	

Course Prefix	Number	Title	Designation
CIS	105	Computer Applications and Information Technology	CS

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
Course involves the use of computer programming languages or software programs for quantitative analysis, modeling, simulation, animation, or statistics	<ul style="list-style-type: none"> - Master business information systems concepts, business applications, security concepts, and overall business systems. - Master spreadsheet applications including formulas, functions & their business applications, charts, modeling & analysis, pivot tables, statistics within a spreadsheet, interpreting results within a organization, common applied business analyse for effective decision making; application in areas of inventory control, return on investment, accounting information systems, etc - Master database applications including data storage, database queries, reporting and exporting data for interpreting results and understanding data to support decisions. 	<p>Weeks two to 16 - Concepts Lecture, and Applied Business Computing Concepts eBooks</p> <p>Weeks two to 11 - Applications Lecture and Prometheus Spreadsheet Software</p> <p>Weeks 12 to 16 - Applications Lecture and Prometheus Database Software</p>
<p>Coure requires students to analyze and implement procedures that are applicable to the following problem domains</p> <p>i. Spreadsheet analysis, systems analysis and design, and decision support systems</p> <p>iv. Modeling, making extensive use of computer simulation</p> <p>v. Statistics studies stressing the use of computer software</p>	<ul style="list-style-type: none"> - Master spreadsheet applications including formulas, functions and their business applications, charts, modeling, analysis, pivot tables, statistics within a spreadsheet, interpreting results within a organization, commonly used decision support analyses. - Master database applications including data storage, database queries, reporting and exporting data for interpreting results, statistics and understanding data to support decisions. - Master business information systems concepts to do systems analysis and design to effectively support decision making. 	<p>Weeks two to 11 - Applications Lecture and Prometheus Spreadsheet Software</p> <p>Weeks 12 to 16 - Applications Lecture and Prometheus Database Software</p> <p>Weeks two to 16 - Concepts Lecture, and Applied Business Computing Concepts eBooks</p>

CIS 105 | Computer Applications and Information Technology

Instructors Matt McCarthy | matthew.mccarthy@asu.edu
Bob Wood | robert.e.wood@asu.edu

Course Objectives

This course will provide an introduction to business information systems from a business intelligence perspective. This course will introduce essential business information systems concepts like system software, platforms, and application software and their relationship to business. Concepts like Primary Storage, Secondary Storage, Data Storage, Mass Storage, Random Access Memory, Cache, BIOS, CMOS, and Cloud Storage with emphasis on business application and decisions. Additional principles include network applications, network deployment, topology and protocols including TCP/IP and UDP. Great emphasis is placed on database and spreadsheet packages for efficient and effective problem solving.

Learning Outcomes

- Understand the methods and approaches of business information systems.
- Develop critical and logical thinking skills by applying business information systems concepts and their relationships to best practices.
- Learn and understand the advantages and drawbacks of business computing concepts like first adopters, leaders, and followers.
- Become an “intelligent” part of any business information systems conversation.
- Understand Moore’s Law and its relationship to effective business decisions.
- Master spreadsheet Formulas and Functions and their business applications.
- Master spreadsheet application software for efficient and effective problem solving.
- Master spreadsheet concepts like Column Charts, Stacked Column Charts, Pie Charts, Line Charts, etc within a business environment.
- Master database application software for efficient and effective problem solving.
- Master database application software concepts like Database Tables, Relationships, Forms, Queries and importing data from external sources.
- Understand Productivity Suite Software packages.

Course Materials

Required digital eBooks: *Applied Business Computing Concepts* (1 through 5) by McCarthy, ISBNs: 9780988635104, 9780988635111, 9780988635128, 9780988635135 and 9780988635142.

Required digital applications eBook: Prometheus Series: Microsoft Excel and Access 2013

Schedule

Week One

Introduction to Computer Information Systems 105 | First Day

Explanations and expectations of ***Computer Information Systems 105***

Week Two

Concepts Lecture | Chapter 1: Business Information Technology | (*Monday Tuesday w/McCarthy*)

Topics | Information Systems, Operating Systems, System Software, Application Software...

Digital Book | *Applied Business Computing Concepts 1*, Chapter 1

Applications Lecture | Excel Basics | (*Wednesday Thursday classes w/Wood*)

1.1 Excel Basics: Getting Started with Excel, 1.2 Cells and Worksheets, 1.3 Formatting Cells and Sheets, 1.4 Sorting and Filtering, 1.5 Test Your Skills: Excel Basics

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Three

Concepts Lecture | Chapter 2: Inside the Computer | (*Monday Tuesday w/McCarthy*)

Topics | System Unit, Microprocessor Configurations, Input, Output, Expansion Slots, Cards...

Digital Book | *Applied Business Computing Concepts 1*, Chapter 2

Applications Lecture | Formulas and Functions | (*Wednesday Thursday classes w/Wood*)

2.1 References and Calculations, 2.2 Summary Statistics Functions, 2.3 Financial Functions, 2.4 Formula Auditing, 2.5 Test Your Skills: Formulas and Functions

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Four

Concepts Lecture | Chapter 3: Operating Systems | (*Monday Tuesday w/McCarthy*)

Topics | Windows, Mac OS, Linux, UNIX, Multitasking, Disk Management, Networking, Drivers...

Digital Book | *Applied Business Computing Concepts 1*, Chapter 3

Applications Lecture | Logic and Reference Functions | (*Wednesday Thursday classes w/Wood*)

3.1 Boolean Functions, 3.2 The "IF" Function, 3.3 Conditional Functions, 3.4 Reference Functions, 3.5 Test Your Skills: Logic and Reference Functions

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

EXAM ONE | Covers Applied Business Computing Concepts 1, Chapters 1, 2, and 3. Includes all concept and application lecture notes.

Week Five

Concepts Lecture | Chapter 4: Storage | (Monday Tuesday w/McCarthy)

Topics | Primary, Secondary, Data Storage, Mass, RAM, CPU Cache, BIOS, CMOS, Cloud Storage...

Digital Book | *Applied Business Computing Concepts 2*, Chapter 4

Applications Lecture | Date, Time, and Text Functions | (Wednesday Thursday classes w/Wood)

4.1 Date and Time Functions, 4.2 Text Functions, 4.3 Test Your Skills: Date, Time, and Text Functions

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Six

Concepts Lecture | Chapter 5: Applications | (Monday Tuesday w/McCarthy)

Topics | Word Processors, Spreadsheets, Database, Presentation, Browser, Specialized Apps...

Digital Book | *Applied Business Computing Concepts 2*, Chapter 5

Applications Lecture | Charting | (Wednesday Thursday classes w/Wood)

5.1 The Charting Environment, 5.2 Column Charts, 5.3 Stacked Column Charts, 5.4 Pie Charts, 5.5 Line Charts, 5.6 Test Your Skills: Test Your Skills: Charting

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Seven

Concepts Lecture | Chapter 6: Why the Computer Works | (Monday Tuesday w/McCarthy)

Topics | System Software, BIOS, Memory Management, Interfacing, Utilities, File Management...

Digital Book | *Applied Business Computing Concepts 2*, Chapter 6

Applications Lecture | Modeling Basics | (Wednesday Thursday classes w/Wood)

6.1 Modeling Basics: Building Spreadsheet Models, 6.2 Modeling Basics: Analyzing Spreadsheet Models Using What-If Analyses, 6.3 Test Your Skills: Test Your Skills: Modeling Basics

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

EXAM TWO | Covers Applied Business Computing Concepts 2, Chapters 4, 5, and 6. Includes all concept and application lecture notes.

Week Eight

Concepts Lecture | Chapter 7: Green Business Computing | (Monday Tuesday w/McCarthy)

Topics | Green Computing, Business Energy Costs, EPEAT Criteria, EPA, Green PCs, Green Business Plan...

Digital Book | *Applied Business Computing Concepts 3*, Chapter 7

Applications Lecture | Advanced Modeling | (Wednesday Thursday classes w/Wood)

7.1 Using Multiple Worksheets and Named Ranges, 7.2 Working with Circular References in Excel, 7.3 Test Your Skills: Advanced Modeling

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Nine

Concepts Lecture | Chapter 8: Networks | *(Monday Tuesday w/McCarthy)*

Topics | Clients, Servers, Peripherals, Collaboration, Topology, TCP/IP, UDP, Administration, LANs...

Digital Book | *Applied Business Computing Concepts 3*, Chapter 8

Applications Lecture | Statistics | *(Wednesday Thursday classes w/Wood)*

8.1 Determining Model Inputs, 8.2 Test Your Skills: Statistics

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Ten

Concepts Lecture | Chapter 9: Internet | *(Monday Tuesday w/McCarthy)*

Topics | History, HTML, HTTP, IP Address, Browsers, eCommerce, Content, Intranets, Cache...

Digital Book | *Applied Business Computing Concepts 3*, Chapter 9

Applications Lecture | Analyzing Data with PivotTables | *(Wednesday Thursday classes w/Wood)*

9.1 PivotTables, 9.2 Test Your Skills: Pivot Tables

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

MIDTERM EXAM | Covers Applied Business Computing Concepts 1,2, and 3, Chapters 1, 2, 3, 4, 5,6, 7, 8, and 9. Includes all concept and application lecture notes.

Week Eleven

Concepts Lecture | Chapter 10: Websites | *(Monday Tuesday w/McCarthy)*

Topics | HTML, HTTP, Monetization, Server, Host, Meta, JavaScript, Flash, Fat Client, Thin Client...

Digital Book | *Applied Business Computing Concepts 4*, Chapter 10

Applications Lecture | Optimization Analysis | *(Wednesday Thursday classes w/Wood)*

10.1 Building Optimization Models, 10.2 Using Solver for Optimization, 10.3 Test Your Skills: Solver

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Twelve

Concepts Lecture | Chapter 11: Security | *(Monday Tuesday w/McCarthy)*

Topics | Risk Management, Privacy, Firewall, Intranet, Malware, DOS Attack, Solutions, Fraud...

Digital Book | *Applied Business Computing Concepts 4*, Chapter 11

Applications Lecture | Storing Data in Access | *(Wednesday Thursday classes w/Wood)*

11.1 Getting Started with Access, 11.2 Database Tables and Relationships, 11.3 Working with Forms, 11.4 Importing Records from External Sources, 11.5 Test Your Skills: Storing Data in Access

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Thirteen

Concepts Lecture | Chapter 12: Information Systems in Business | *(Monday Tuesday w/McCarthy)*

Topics | Business Functions, Roles, IT Roles in Accounting, HR, Marketing, R&D, Production, Reporting...

Digital Book | *Applied Business Computing Concepts 4*, Chapter 12

Applications Lecture | Database Queries | *(Wednesday Thursday classes w/Wood)*

12.1 Simple Database Queries, 12.2 Using Queries to Find Specific Records, 12.3 Creating Queries with Special Criteria, 12.4 Test Your Skills: Basic Queries

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

EXAM FOUR | Covers Applied Business Computing Concepts 4, Chapters 10, 11, and 12. Includes all concept and application lecture notes.

Week Fourteen

Concepts Lecture | Chapter 13: Careers | *(Monday Tuesday w/McCarthy)*

Topics | Perceptions, IT Jobs, Business Intelligence, Analytics, ERPs, UML, SDLC, RAD, Prototyping...

Digital Book | *Applied Business Computing Concepts 5*, Chapter 13

Applications Lecture | Intermediate Queries | *(Wednesday Thursday classes w/Wood)*

13.1 Multi-table and Parameter Queries, 13.2 Aggregate Queries, 13.3 Queries with Calculated Fields, 13.4 Crosstab Queries, 13.5 Test Your Skills: Intermediate Queries

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Fifteen

Concepts Lecture | Chapter 14: Database | *(Monday Tuesday w/McCarthy)*

Topics | Structure, SQL, Database Queries, Case Study, Best Practice,

Digital Book | *Applied Business Computing Concepts 5*, Chapter 14

Applications Lecture | Getting Data out of Access | *(Wednesday Thursday classes w/Wood)*

14.1 Creating Reports In Access, 14.2 Exporting Data from Access, 14.3

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

Week Sixteen

Concepts Lecture | Chapter 15: Cloud Computing | *(Monday Tuesday w/McCarthy)*

Topics | Cloud Structure, iDrives, CSPs, TOS, SaaS, Open Office, PaaS...

Digital Book | *Applied Business Computing Concepts 5*, Chapter 15

Applications Lecture | Getting Data out of Access | *(Wednesday Thursday classes w/Wood)*

Test Your Skills: Getting Data Out of Access

Online Book | *Prometheus Series: Microsoft Excel and Access 2013*

FINAL EXAM | Covers Applied Business Computing Concepts 4 and 5, Chapters 10, 11, 12, 13, 14, and 15. Includes all concept and application lecture notes.

Academic Integrity

Academic Integrity: From the ASU General Catalog: "...the highest standards of academic integrity are expected of all students. Failure to meet these standards may result in suspension or expulsion from the university and other sanctions as specified in the academic integrity policies of the individual colleges. Violations of academic integrity include, but are not limited to cheating, fabrication, tampering, plagiarism, or facilitating such activities..." Read the Academic Integrity Policies from the ASU General Catalog or website extremely carefully. Do your own work.

Disability Resource Center

Every effort will be made to accommodate students with disabilities. When requesting accommodations for a disability, students should register with the Disability Resource Center (DRC), and then submit appropriate documentation through it. <http://www.asu.edu/aad/manuals/ssm/ssm701-01.html>

Exam and Late Assignment Policy

To receive full credit on assignments you must submit them on time. With a documented excuse, assignments may be submitted up to a week late and receive half credit. Assignments for which no credit is given will still be accepted by the system and feedback provided to the student. No retakes on missed exams.

Grading Scale

97+	A+
93 to 96.9	A
90 to 92.9	A-
87 to 89.9	B+
83 to 86.9	B
80 to 82.9	B-
77 to 79.9	C+
70 to 76.9	C
60 to 69.9	D
Below 60	E

Required digital eBooks: Applied Business Computing Concepts (1 through 5) by McCarthy, ISBNs: 9780988635104, 9780988635111, 9780988635128, 9780988635135 and 9780988635142.

Text Chapters & Sections

- **Applied Business Computing Concepts 1**
 - **Chapter One:** Business Information Systems
 - Business Information Systems
 - Business Information Technology
 - Business Computing Hardware
 - System Software
 - Operating Systems
 - Application Software
 - Business Computing Software
 - Word Processing Software
 - Spreadsheet Software
 - Database Software
 - Presentation Software
 - Specific-use Business Application Software
 - Browser Software
 - Networks
 - **Chapter Two:** Inside the Computer
 - Inside the Box
 - The System Unit
 - Microcomputer Configurations
 - Expansion Slots & Cards
 - Input & Output Devices
 - Input Devices
 - Output Devices
 - **Chapter Three:** Operating Systems
 - Operating Systems
 - Understanding Operating Systems
 - Processes / Multitasking
 - Microsoft Excel and Microsoft word multitasking
 - Memory Management and Storage
 - Disk Management
 - File Management
 - Networking
 - Device Drivers
 - Graphical User Interface
 - Embedded Operating Systems
 - Microsoft Windows® versus Mac OS®
 - Major Operating Systems
 - Open Source Operating Systems
- **Applied Business Computing Concepts 2**

- **Chapter Four: Storage**
 - Business Network Options
 - Data Storage
 - Ones and Zeros
 - Physical Storage Characteristics
 - Characteristics of Storage Media
 - Business Storage Strategies
 - Data Archiving and Backup Strategies

- **Chapter Five: Applications**
 - Application Software
 - Business Application Software Suites
 - Word Processing Software
 - Spreadsheets
 - Microsoft Excel Spreadsheet
 - Databases
 - Presentation Software
 - Sharing Information
 - Best Practice
 - Applying Application Software to Best Practice
 - Case Study Problem
 - Case Study Solution
 - Improving Best Practice and Business Repercussions
 - Specialized Application Software
 - Web Authoring Application Software
 - Other Business Application Software
 - Collaborative Application Software

- **Chapter Six: Why the Computer Works**
 - System Software
 - Starting the Computer
 - Administering Application Software
 - Memory Management
 - Device Drivers
 - Interfacing and Utilities
 - File Management Systems
 - System Software Utilities
 - Backup Utilities
 - Antivirus Utilities
 - System Updates

- **Applied Business Computing Concepts 3**

- **Chapter Seven: Green Business Computing**
 - Green Business Computing
 - Information Technology Challenges and Opportunities
 - EPEAT - Electronic Product Environmental Assessment Tool
 - EPEAT Criteria

- Energy Star® Specifications
- The Green PC
- Green Computing Business Plan
- Telecommuting

- **Chapter Eight: Networks**
 - Networks
 - Building A Computer Network
 - Network Operating Systems
 - Network Topology
 - Types of Computer Networks
 - Network Security

- **Chapter Nine: Internet**
 - Internet History
 - Internet and World Wide Web Structure
 - Internet Address
 - Websites
 - Browsers
 - Browser Features
 - Internet Service Providers (ISP)
 - Search Engines
 - E-commerce
 - Security
 - E-mail
 - Email Security
 - Voice Over Internet Protocol (VoIP)
 - Intranet

- **Applied Business Computing Concepts 4**

- **Chapter Ten: Websites**
 - Business Website Alternatives
 - Early Website Technology
 - Hypertext Markup Language
 - Website Styles and Categories
 - Types of Websites
 - Website Online Software
 - Online Advertising

- **Chapter Eleven: Security**
 - System Security and Computer Privacy
 - Business System Threats
 - Firewalls
 - Malware Threats
 - Malware Solutions
 - Passwords
 - Internet Fraud
 - Computer Privacy

- Identity Theft
- **Chapter Twelve:** Information Systems in Business
 - Business Functions
 - Information Systems Role in Business Departments
 - The Accounting Department
 - The Human Resources Department
 - The Marketing Department
 - The Research and Development (R&D) Department
 - The Production Department
 - Information Systems Collaboration
 - Business System Reporting
- **Applied Business Computing Concepts 5**
 - **Chapter Thirteen:** Careers
 - Information Technology Careers
 - Business Information Technology Perception
 - Information Technology Jobs
 - Knowing The Business
 - Enterprise Resource Planning Solutions
 - Unified Modeling Language
 - System Development Methodologies
 - **Chapter Fourteen:** Database
 - Database Definition
 - Database Structure
 - Business Database Advantages
 - Structured Query Language
 - Business Database Scenario and Implications
 - Business Database Scenario Advantages
 - Business Database Scenario Disadvantages
 - **Chapter Fifteen:** Cloud Computing
 - What is Cloud Computing?
 - Cloud Drives
 - Cloud Drive Concerns
 - Storage as a Service (StaaS)
 - Software as a Service (SaaS)
 - Replacing Traditional Software with SaaS
 - Open Office and the Cloud
 - Startup Savings with the Cloud
 - Platform as a service (PaaS)

CIS 105 – Computer Applications and Information Technology

Required Digital Applications eBook: Prometheus Series: Microsoft Excel and Access 2013

Table of Contents

Lesson 1: Excel Basics

- 1.1 Excel Basics: Getting Started with Excel
- 1.2 Cells and Worksheets
- 1.3 Formatting Cells and Sheets
- 1.4 Sorting and Filtering
- 1.5 Test Your Skills: Excel Basics

Lesson 2: Formulas and Functions

- 2.1 References and Calculations
- 2.2 Summary Statistics Functions
- 2.3 Financial Functions
- 2.4 Formula Auditing
- 2.5 Test Your Skills: Formulas and Functions

Lesson 3: Logic and Reference Functions

- 3.1 Boolean Functions
- 3.2 The "IF" Function
- 3.3 Conditional Functions
- 3.4 Reference Functions
- 3.5 Test Your Skills: Logic and Reference Functions

Lesson 4: Date, Time, and Text Functions

- 4.1 Date and Time Functions
- 4.2 Text Functions
- 4.3 Test Your Skills: Date, Time, and Text Functions

Lesson 5: Charting

- 5.1 The Charting Environment
- 5.2 Column Charts
- 5.3 Stacked Column Charts
- 5.4 Pie Charts
- 5.5 Line Charts
- 5.6 Test Your Skills: Test Your Skills: Charting

Lesson 6: Modeling Basics

- 6.1 Modeling Basics: Building Spreadsheet Models
- 6.2 Modeling Basics: Analyzing Spreadsheet Models Using What-If Analyses
- 6.3 Test Your Skills: Test Your Skills: Modeling Basics

Lesson 7: Advanced Modeling

- 7.1 Using Multiple Worksheets and Named Ranges
- 7.2 Working with Circular References in Excel
- 7.3 Test Your Skills: Advanced Modeling

Lesson 8: Statistics

- 8.1 Determining Model Inputs
- 8.2 Test Your Skills: Statistics

Lesson 9: Analyzing Data with PivotTables

- 9.1 PivotTables
- 9.2 Test Your Skills: Pivot Tables

Lesson 10: Optimization Analysis

- 10.1 Building Optimization Models
- 10.2 Using Solver for Optimization
- 10.3 Test Your Skills: Solver

Lesson 11: Storing Data in Access

- 11.1 Getting Started with Access
- 11.2 Database Tables and Relationships
- 11.3 Working with Forms
- 11.4 Importing Records from External Sources
- 11.5 Test Your Skills: Storing Data in Access

Lesson 12: Database Queries

- 12.1 Simple Database Queries
- 12.2 Using Queries to Find Specific Records
- 12.3 Creating Queries with Special Criteria
- 12.4 Test Your Skills: Basic Queries

Lesson 13: Intermediate Queries

- 13.1 Multi-table and Parameter Queries
- 13.2 Aggregate Queries
- 13.3 Queries with Calculated Fields
- 13.4 Crosstab Queries
- 13.5 Test Your Skills: Intermediate Queries

Lesson 14: Getting Data Out of Access

- 14.1 Creating Reports In Access
- 14.2 Exporting Data from Access
- 14.3 Test Your Skills: Getting Data Out of Access