**Instructor** | Matt McCarthy | **Email** | McCarthyASU@asu.edu **Office Hours** | Monday and Wednesday, 12:30 PM to 3:00 PM

# **Digital eBooks**

MyEducator Applied Business Computing Concepts

MyEducator Prometheus Series: Microsoft Excel and Microsoft Access

#### Week One

#### **Concepts Lecture**

Introduction to Computer Information Systems 105 | First Day

Explanations and expectations of Computer Information Systems 105

CIS105 is a Carbon Zero Class!

### Week Two

#### **Concepts Lecture**

**Information Systems** | Applied Business Computing Concepts, Chapter 1

**Topics** | Everything Changes, Business Information Technology, Business Computing Hardware, System Software, Operating Systems, Business Computing Software.

**Application Software** | Applied Business Computing Concepts, Chapter 2

**Topics** | Application Software, Word Processing Software, Spreadsheet Software, Database Software, Presentation Software, Specific-use Application Software, Browser Software, Networks.

#### **Applications Lab**

**Excel Basics** | *Prometheus Series: Microsoft Excel and Access* 

**Topics** | 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

# **Week Three**

#### **Concepts Lecture**

**Inside the Computer** | Applied Business Computing Concepts, Chapter 3

**Topics** | Inside the Box, The System Unit, Microcomputer Configurations, Expansion Slots & Cards, Input and Output Devices, Output Devices.

### **Applications Lab**

Formulas and Functions | Prometheus Series: Microsoft Excel and Access

**Topics** | 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

### **Week Four**

# **Concepts Lecture**

Operating Systems | Applied Business Computing Concepts, Chapter 4

**Topics** | Operating Systems, Understanding Operating Systems, Processes / Multitasking, Memory Management and Storage, Disk Management, File Management, Networking, Device Drivers, Graphical User Interface, Embedded Operating Systems, Microsoft Windows vs. Mac OS, Major Operating Systems, Open Source Operating System.

### **Applications Lab**

**Logic and Reference Functions** | *Prometheus Series: Microsoft Excel and Access* **Topics** | 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

# **Week Five**

#### **Concepts Lecture**

**Business Storage** | *Applied Business Computing Concepts, Chapter 5* **Topics** | Business Options, Data Storage, Ones and Zeros, Physical Storage Characteristics, Characteristics of Storage Media, Business Storage Strategies.

### **Applications Lab**

**Date, Time, and Text Functions** | *Prometheus Series: Microsoft Excel and Access* **Topics** | 4.1 Date and Time Functions, 4.2 Text Functions, 4.3 Test Your Skills: Date, Time, and Text Functions

# **Week Six**

#### **Concepts Lecture**

System Software | Applied Business Computing Concepts, Chapter 6

**Topics** | Starting a Computer, Administering Application Software, Memory Management, Device Drivers, Interfacing and Utilities, File Management Systems, System Software Utilities, Backup Utilities, Antivirus Utilities, System Updates.

#### **Applications Lab**

**Charting |** *Prometheus Series: Microsoft Excel and Access* 

**Topics** | 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: Charting

### **Week Seven**

### **Concepts Lecture**

**Green Business Computing** | Applied Business Computing Concepts, Chapter 7

**Topics** | Green Business Computing, Information Technology Challenges and Opportunities, EPEAT – Electronic Product Environmental Assessment Tool, EPEAT Criteria, Energy Star, The Green PC, Green Computing Business Plan.

## **Applications Lab**

Modeling Basics | Prometheus Series: Microsoft Excel and Access

**Topics** | 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 MyEducator | *Prometheus Series: Microsoft Excel and Access 2013* 

# Week Eight

#### **Concepts Lecture**

**Computer Networks** | Applied Business Computing Concepts, Chapter 8

**Topics** | Networks, Building a Computer Network, Network Operating Systems, Network Topology, Types of Computer Networks, Network Security.

### **Concepts Lecture**

Internet | Applied Business Computing Concepts, Chapter 9

**Topics** | Internet History, Internet and World Wide Web Structure, Internet Address, Websites, Browsers, Browser Features, Internet Service Providers (ISP), Search Engines, E-commerce, Security, Email, Email Security, Voice Over Internet, Protocol (VOIP), Intranet.

### **Applications Lab**

**Advanced Modeling |** Prometheus Series: Microsoft Excel and Access

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

# **Week Nine**

#### **Concepts Lecture**

**Business Websites** | Applied Business Computing Concepts, Chapter 10

**Topics** | Business Website Alternatives, Early Website Technology, Hypertext Markup Language, Website Styles and Categories, Types of Websites, Website Online Software, Online Advertising.

### **Applications Lab**

**Statistics** | *Prometheus Series: Microsoft Excel and Access* 

**Topics** | 8.1 Determining Model Inputs, 8.2 Test Your Skills: Statistics

### Week Ten

## **Concepts Lecture**

Computer Security | Applied Business Computing Concepts, Chapter 11

**Topics** | System Security and Computer Privacy, Business System Threats, Firewalls, Malware Threats, Malware Solutions, Passwords, Internet Fraud, Computer Privacy, Identity Theft.

# **Applications Lab**

Analyzing Data with PivotTables | Prometheus Series: Microsoft Excel and Access

**Topics** | 9.1 PivotTables, 9.2 Test Your Skills: Pivot Tables

## Week Eleven

### **Concepts Lecture**

Information Systems in Business | Applied Business Computing Concepts, Chapter 12

**Topics** | Business Functions, Business Departments, The Accounting Department, The Human Resources Department, The Marketing Department, The Research and Development Department, The Production Department, Information Systems Collaboration.

### **Applications Lab**

**Optimization Analysis** | *Prometheus Series: Microsoft Excel and Access* 

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

## **Week Twelve**

### **Concepts Lecture**

**Business System Reporting** | Applied Business Computing Concepts, Chapter 13

**Topics** | Business System Reporting, Demand Reports, Periodic Reports, Summarization Levels, Actuals, Forecasts, Variance.

#### **Concepts Lecture**

Information Technology Careers | Applied Business Computing Concepts, Chapter 14

**Topics** | Information Technology Careers, Business Information Technology Perception, Information Technology Jobs, Knowing the Business, Enterprise Resource Planning Solutions, Unified Modeling Language, System Development Methodologies.

### **Applications Lab**

**Storing Data in Access** | *Prometheus Series: Microsoft Excel and Access* 

**Topics** | 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

### **Week Thirteen**

# **Concepts Lecture**

Database | Applied Business Computing Concepts, Chapter 15

**Topics** | Database Definition, Database Structure, Business Database Advantages, Structured Query Language, Business Database Scenario and Implications, Business Database Scenario Advantages, Business Database Scenario Disadvantages.

### **Applications Lab**

**Database Queries |** Prometheus Series: Microsoft Excel and Access

**Topics** | 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

### **Week Fourteen**

#### **Concepts Lecture**

**Cloud Computing** | Applied Business Computing Concepts, Chapter 16

**Topics** | What is Cloud Computing, Cloud Drives, Cloud Drive Concerns, Infrastructure as a Service (IaaS), Storage as a Service (StaaS), Software as a Service (SaaS), Replacing Traditional Software with SaaS, Startup savings with the Cloud, Platform as a Service (PaaS).

#### **Applications Lab**

**Intermediate Queries** | Prometheus Series: Microsoft Excel and Access

**Topics** | 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

### **Week Fifteen**

#### **Concepts Lecture**

**Business Intelligence** | Applied Business Computing Concepts, Chapter 17

**Topics** | Business Intelligence at Work, How Did We Get Here, Three Types of Data, The Four V's of Big Data, Extract, Transform, and Load, Hadoop, Map Reduce. Analyzing Big Data, Data Visualization,

### **Applications Lab**

**Getting Data out of Access** | *Prometheus Series: Microsoft Excel and Access* 

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

### **Week Sixteen**

# **Concepts Lecture**

**Mobile Apps** | Applied Business Computing Concepts, Chapter 18

**Topics** | The Beginning, Building a Mobile App, Defining Your Mobile App Goals, Start Visualizing Your Mobile App, Investigate Your Mobile App, Mobile App Monetization, Creating a Mockup of Your Mobile App, Code a Prototype, Prototype Testing, Launch, Repeat, Revise.

## **Applications Lab**

**Getting Data out of Access |** Prometheus Series: Microsoft Excel and Access

**Topics** | Test Your Skills: Getting Data Out of Access

# **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.

# Assignments

Do your own work. The assignment grading software can detect if you have copied all or part of another student's work. Significant penalties may result from submitting another student's work as your own.

# **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. No credit will be given for assignments submitted more than a week late or after December 8, 11:59 PM.

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 | GradeCalculator.xlsx
Attached Files | GradeCalculator.xlsx
Use this spreadsheet to calculate your semester grade.