

ITSC 1018 Course Syllabus

Name of Course: MCTS Microsoft Project

2. Number of Clock Hours: 36

3. Course Description:

This course provides students with the knowledge and skills to build, maintain, and control well-formed project plans. This is the first course in the Microsoft Office Project 2007 Official Curriculum series and serves as the entry point for other Microsoft Official Curriculum (MOC) courses covering Microsoft Office Project 2007 and the Microsoft Enterprise Project Management (EPM) 2007 Solution. MOC 5927. **Prerequisites:** Experience using Microsoft Office Project to create project schedules & Fundamental knowledge of project management.

4. Course Objectives

After completing this course, students will be able to:

- Get started with Microsoft Office Project 2007.
- Create and define projects.
- Work with estimates and dependencies.
- Work with deadlines, constraints, and task calendars.
- Work with resources.
- Predict behavior by using task types and the scheduling formula.
- Customize and format Microsoft Project views.
- Analyze resource utilization.
- Track progress.
- Create project reports that analyze project, resource, and task data.
- Manage multiple projects.

5. Rationale:

Upon completion of this course, students will have a better understanding of Microsoft Project, the most popular project management system in use today.

6. Required Materials:

Microsoft Official Curriculum, MOC 5927, included.

7. Evaluation

Those who participate in class discussions, complete course lab work, and miss no more than three class meetings will be awarded 3.6 continuing education units.

8. Course Outline

Module 1: Getting Started with Microsoft Office Project 2007

This module provides an overview of Microsoft Office Project 2007 and project management concepts. It explains how to use the desktop interface and how to work with various file types. It also illustrates how to receive help and advice while working with Office Project 2007.

Lessons

- Understanding the Nature of Projects
- Discovering Project 2007
- Understanding Project 2007 File Types
- Navigating the Project 2007 Interface
- Getting Help and Guidance
- Configuring Options

After completing this module, students will be able to:

- Describe the nature of projects.
- Demonstrate familiarity with Office Project 2007.
- Identify the different Office Project 2007 file types.
- Navigate the Office Project 2007 interface.
- Get help and guidance from within Office Project 2007.
- Understand configuration options.

Module 2: Creating and Defining Projects

This module explains how to create new projects, how to define appropriate options, and how to enter, organize, and outline the task list. It also explores ways to import data from other sources and provides guidance on configuring the corporate calendar.

Lessons

- Creating and Saving Projects
- Defining Properties and Options
- Creating and Organizing the Task List
- Importing Data
- Modifying and Applying Calendars
- Setting Scheduling Options

Lab 2: Creating and Defining Projects

- Entering Project and File Properties
- Setting Appropriate Schedule Options
- Setting Corporate Holidays
- Importing Data from Office Excel
- Update a Task List
- Creating a Multilevel Outline

After completing this module, students will be able to:

- Create and save projects.
- Define file properties and options.
- Create and organize the task list.
- Import data.
- Modify and apply calendars.
- Set schedule options.

Module 3: Working with Estimates and Dependencies

This module explains how to estimate tasks and how to generate a dynamic schedule by creating dependencies between tasks. Various linking and unlinking techniques will be explored in multiple views and link types will be modified to reflect real-world scenarios.

Lessons

- Entering Task Estimates
- Using A PERT Analysis to Estimate Task Duration
- Linking and Unlinking Tasks by Using the Gantt Chart View
- Linking and Unlinking Tasks by Using the Network Diagram View
- Adding Lag or Lead Time to a Linked Task

Lab 3: Working with Estimates and Dependencies

- Entering a Duration or Work Estimate
- Creating Links Between Tasks
- Adding Lag or Lead Times
- Displaying Links in Network Diagram View

After completing this module, students will be able to:

- Enter task estimates.
- Use a PERT (Program Evaluation and Review Technique) analysis to estimate task durations.
- Link and unlink tasks by using the Gantt Chart view.
- Link and unlink tasks by using the Network Diagram view.
- Add Lag or Lead-time to a linked task.

Module 4: Working with Deadlines, Constraints, and Task Calendars

This module explains how to incorporate restrictions in a schedule by using of deadlines and constraints. Displaying, reading, and analyzing the critical path will be discussed, along with how to use task drivers in the analysis. Task calendars will be presented as a technique to get a schedule back in line with a deadline or constraint.

Lessons

- Introducing Deadlines, Constraints, and Task Calendars
- Creating and Modifying Deadlines
- Creating and Modifying Constraints
- Creating and Modifying Task Calendars
- Identifying Critical Tasks
- Working with Task Driver

Lab 4: Working with Deadlines, Constraints, and Task Calendars

- Displaying the Critical Path
- Setting a Deadline
- Setting a Constraint
- Responding to Situations Triggered by Deadlines and Constraints
- Creating and Apply a Task Calendar to Meet a Deadline
- Finding and Removing Constraints in a Schedule

After completing this module, students will be able to:

- Introduce deadlines, constraints, and task calendars.
- Create and modify deadlines.
- Create and modify constraints.
- Create and modify task calendars.
- Identify critical tasks.
- Work with Task Drivers.

Module 5: Working With Resources

This module explains the various types of resources that are needed on a schedule, how to enter the resource list, and how to assign resources to tasks. Changes to the project team will be implemented by modifying resource assignments. Various types of costs will also be covered including resource costs, task costs, and project budgets.

Lessons

- Introducing Resources, Assignments, and Budgeting

- Adding Resources to the Resource Sheet
- Creating and Modifying Resource Assignments
- Entering Project Budgets

Lab 5: Working with Resources

- Adding Resources to the Resource Sheet View
- Creating and Modifying Resource Assignments
- Entering Project Costs and Project Budgets

After completing this module, students will be able to:

- Describe resources, assignments, and budgeting.
- Add resources to the Resource Sheet view.
- Create and modify resource assignments.
- Understand the fundamentals of project budgets.

Module 6: Predicting Behavior by Using Task Types and the Scheduling Formula

This module explains the scheduling formula and the interaction between the variables duration, work, and units. It also illustrates how recalculations occur when variables are changed. This module explains recommended procedures on changing task types and changing variables for various situations.

Lessons

- Using Task Types and the Scheduling Formula
- Changing Variables and Predicting Behavior
- Applying Task Types to Produce Predictable Behavior
- Special Situations with Effort-Driven Scheduling

Lab 6: Understanding Task Types and the Scheduling Formula

- Identifying the Fixed Variable in a Task and How It Affects the Scheduling Formula
- Making Decisions about Task Type and Effort-Driven Settings
- Predicting the Scheduling Formula When Changing Variables

After completing this module, students will be able to:

- Use Task Types and the scheduling formula for effective calculations.
- Change variables and predict behavior.
- Apply task types to produce predictable behavior.
- Describe special situations within effort-driven scheduling.

Module 7: Customizing and Formatting

This module explains how to format text, bars, and other screen elements. Custom objects will be created including templates, calendars, fields, tables, filters, groups, and views. This module also illustrates use of the Organizer to transfer custom objects to other files.

Lessons

- Formatting Screen Elements
- Creating and Modifying Templates
- Creating and Modifying Fields, Tables, and Formulas
- Creating and Modifying Filters and Groups
- Creating and Modifying Custom Views

Lab 7: Customizing and Formatting

- Modifying a Template to Include Corporate Standards
- Creating Simple and Complex Custom Fields
- Populating a New Table with Existing and Custom Fields
- Developing a New Filter And Group
- Moving an Object from a Project to the Global.mpp File

After completing this module, students will be able to:

- Format screen elements.
- Create and modify templates.
- Create and modify fields, tables, and formulas.
- Create and modify filters and groups.
- Create and modify custom views.

Module 8: Analyzing Resource Utilization

This module explains techniques for manipulating views to display resource allocation and how to identify causes of resource overallocation. Various options for managing limited resources will be explored. In addition, several techniques for solving overallocated resources will be explained, including the leveling feature.

Lessons

- Introducing Resource Utilization Concepts
- Viewing Resource Assignments, Allocation, and Utilization
- Managing Resource Availability
- Optimizing and Leveling Resource Assignments

Lab 8: Analyzing Resource Utilization

- Reading and Interpreting Resource Allocation Views
- Changing Resource Availability and Interpreting Results
- Identifying and Correcting Causes of Resource Overallocation

After completing this module, students will be able to:

- Describe resource utilization concepts.
- View resource assignments, allocation, and utilization.
- Manage resource availability.
- Optimize and level resource assignments.

Module 9: Tracking Progress

This module explains how to manage updates to a schedule by saving baselines and tracking duration, work, and cost updates. Comparison between expected and actual results will be illustrated with various views that display variance. In addition, this module provides guidelines on how to troubleshoot a schedule and how to get a troubled schedule back on track.

Lessons

- Working With Baselines
- Entering Duration Updates
- Entering Work Updates
- Entering Cost Updates
- Discovering Variances
- Troubleshooting and Getting Back on Track

Lab 9: Tracking Progress

- Setting and Revising a Baseline
- Entering Actual Results Updates for Tasks and Resources
- Controlling Projects by Finding Variance and Suggesting Corrective Action
- Applying Techniques to Shorten Duration, Reduce Work, and Reduce Cost

After completing this module, students will be able to:

- Work with baselines.
- Enter duration updates.
- Enter work updates.
- Enter cost updates.
- Discover variances.
- Trouble shoot schedules and get back on track.

Module 10: Creating Reports

This module explains how to configure views for printing and how to generate standard and visual reports. Customizations to printouts and modifications to existing reports will also be covered. This module will explain how to export data and explore techniques for solving printing issues.

Lessons

- Selecting, Editing, and Creating Basic Reports
- Configuring Print and Page Setup Options
- Setting Options to Correct Printing Issues
- Exporting Reporting Data
- Creating and Modifying Visual Reports

Lab 10: Creating Reports

- Applying Solutions to Various Printing Scenarios
- Running Basic Reports That Summarize Data by Project, by Resource, by Task, or by Cost
- Developing a New Basic Report
- Exporting Data by Using a Custom Map to Merge with Data in an Existing Excel Spreadsheet
- Running Visual Reports That Summarize Data by Project, by Resource, by Task, or by Cost
- Developing a New Visual Report Template

After completing this module, students will be able to:

- Select, edit, and create standard reports.
- Configure print and page setup options.
- Set options to correct printing issues.
- Export project data.
- Create and modify visual reports.

Module 11: Managing Multiple Projects

This module explains how to create and manage multiple projects. It will cover links and the critical path across multiple projects. It also discusses how to create and use a shared resource pool and how to view resource allocation across multiple projects.

Lessons

- Introducing Management of Multiple Projects
- Creating Master Projects

- Creating Links Between Projects
- Calculating Single or Multiple Critical Paths
- Saving and Opening Multiple Projects
- Sharing Resources and Analyzing Resource Utilization Across Multiple Projects

Lab 11: Managing Multiple Projects

- Inserting Subprojects into a Master Project
- Creating Links Across Projects and Managing Changes to Linked Tasks
- Displaying the Critical Path in a Master Project
- Creating and Sharing a Resource Pool
- Reading and Interpreting Resource Usage Across Multiple Projects

After completing this module, students will be able to:

- Introduce management of multiple projects.
- Create master projects.
- Create links between projects.
- Calculate single or multiple critical paths.
- Save and open multiple projects.
- Share resources and analyze resource utilization across multiple projects.