



# The small print

# Prerequisites

Time in the workshop is precious – it is an opportunity for you to interact with the workshop leader and other participants through questions and discussions and to share your experiences and concerns. To make the most of this time we sometimes ask you to carry out learning activities ahead of the workshop so that everyone comes into the class with the same basic knowledge. We keep this prior learning to a minimum and often make use of online videos. Online videos provided through LinkedIn Learning can be accessed free of charge by University members anytime, anywhere, through a browser or app.

Your course booking will tell you if any prior learning activity is required. If you don't have an environment where you can do this learning, you can come along to one of our LinkedIn Learning sessions. These are a quiet space where you can work through videos or other workshop resources.

If you arrive for a workshop without having done the prior learning, the workshop leader may suggest that you come back on another session.

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## About the workshop designer

Jean Glendinning has had decades of experience working with and teaching others how to effectively use applications in a business and academic environment. She has used Microsoft Project since its earliest incarnations and has seen it grow and develop. She has worked with researchers and departments across the University. She brings a pragmatic approach to developing and managing a Project plans and delights in making the user confident to create and manage their own plans.

Jean's roots are in education, working with blue-chip industrial companies, technical consultancy and small businesses. Her commitment in teaching and consulting is to enable people to use appropriate technology in their work, efficiently and to a high standard.

#### **Revision history**

| Version | Date          | Author           | Comments                            |
|---------|---------------|------------------|-------------------------------------|
| 3.0     | November 2022 | Jean Glendinning | Minor edits and small print updates |
| 2.0     | November 2019 | Jean Glendinning | Amended elements                    |
| 1.0     | October 2019  | Jean Glendinning | Created                             |
| 1.1     | November 2022 | Jean Glendinning | Updated                             |

# About this workshop

This workshop helps you to understand the complexities of Microsoft Project and how to use it as a tool to facilitate the smooth running of your projects.

### What you will learn

We will discuss the parameters to consider when setting up a project plan and how to design your own plan. How to manage resources and get a basic costing of your project. We will consider ways in which the Microsoft Project can help to model different potential outcomes, and ways of presenting that information to stakeholders.

We work through the development of a plan from considering the task to utilising the resources available. We will consider the tracking of a live project as well as reporting on it at stages through the progress.

### What you need to know

No previous knowledge of Microsoft Project is expected.

I will assume that you are reasonably confident in using other Microsoft products; you will need already to be able to:

- Insert, correct and format text
- Create and save documents
- Navigate the commands and menus, using Help as necessary
- Opening and saving files from folders

If you need to review these activities, LinkedIn Learning is a great place to get guidance.

### The resources you need

Sample documents that you can use to experiment with will be made available, but you may like to bring along your own.

The resources for most workshops, including any pre-course activity, are in the IT Learning Portfolio: visit <u>skills.it.ox.ac.uk/it-learning-portfolio</u> and search for "Project".

Unless you have been told otherwise, in classroom workshops there will be a computer available for you to use with *Microsoft Project* installed.

You can use your own computer with your preferred app installed if you want to – just bear in mind that I am not an expert in every app (although I am sure that between us we will be able to sort out most problems!).

# Learning Objectives

This workshop has the following learning objectives:
Learning Objective One : Creating a task list
Learning Objective Two : Linking tasks
Learning Objective Three : Define and manage the Project calendar
Learning Objective Four : Manage and use Resources
Learning Objective Five : Monitoring and Tracking a Project
Learning Objective Six : Evaluation and Reporting

## Learning Objective One : Creating a task list

To add tasks for a new project, you need to decide if you are going to use the Auto scheduling feature. If you choose to, you need to resist the temptation to fill in all the columns of the Gantt Chart view - particularly Start and Finish dates. These columns are calculated and recalculated - based on other data that you will enter: the duration of the task, the linked dependencies, and the availability of the resource assigned to it.

Whenever you enter a task it will have a constraint set on it. If it is under the Auto setting this will be a variable constraint of either **as Soon as Possible** or **as Late as Possible** within the slack of the programme. If you enter a specific date in the Start or Finish columns, it becomes a Fixed Constraint – a fixed date. This may be necessary as the project develops – but is not usually necessary during the initial entry of information.

A suggested procedure for entering task information – Try it:

- decide on the order in which tasks will be entered and give each group of tasks a title
- enter the individual tasks using a "verb+noun" naming convention
- enter milestones (to mark the end of each significant phase) using a "noun+verb" naming convention, and assigning a duration of 0 days
- group tasks underneath their title, by selecting the task rows and indenting



## Learning Objective Two : Linking tasks

Select all the tasks which are to be linked and click the link button on the Task Ribbon. Tasks can be unlinked in a similar way, using the unlink button.

The order in which you select the tasks is important. The first task you select is where the dependency begins ("From") and the second task you select is where the dependency ends ("To").

There are four different types of dependency available. Add some tasks and look at the effect of the different types. Then Try adding Lag times. Use the task information dialogue box to do so.



Learning Objective Three : Define and manage the Project calendar

Look at the calendar for the overall project – not the individual resources who work on it. These will be added later. Decide on the working and non-working time for your organisation.

Enter company holiday periods and Bank Holidays. Make sure that you include these far enough ahead as if the start date of the project moves you will want to make sure that they are all included.

What happens to the duration of the project when you add in a "holiday period" to the calendar? Does it have a longer duration? Is the end date the same?

It is also very important that the working day length is set accurately as this will affect costings later in the project if not done at the outset.

When you have added resources, you will be able to adjust the working time for each resource as necessary, but it is vital to have the overall working day accurately.

Make a template version for your organisation which contains all these factors set up, including public holidays. Then this can be reused repeatedly for new projects without having to repeat these steps.



Learning Objective Four : Managing and Using Resources

Resources can come from a previously created list (even your Contacts). To apply the resources select a task in the table and click the Assign Resources button, then Assign.

Watch what happens if you assign more than one resource. Check how the duration is affected if you add a resource later.

Try adjusting the amount of time a resource is allocated for.

What happens if you assign a resource to do more than one thing at the same time?

Use the Resource Allocation buttons to see how Project automatically adjusts when a task will happen.



Learning Objective Five : Monitoring and Tracking a Project

Saving a Baseline allows you to check the progress of you project against your original plan.

Save your plan with a baseline, then make changes to the duration of one or two tasks. Use the Tracking Gannt view to compare your old plan with the new one.

Mark some tasks as complete. What changes do you see? Can you change the duration of a task after it is marked complete?

Learning Objective Six : Evaluation and Reporting

There are many ways of displaying the information that you have gathered in your Project file. Try these different options.

Look at the Project Statistics (Project, Project information, Statistics) - What does this show you?

Display the timeline and add some tasks to it.

Try using the Copy Picture option to take a snapshot of your plan to be included in a report, presentation or attached to an email.

Change the table that is shown alongside the Gannt chart to one which shows Costs. Are there other tables that are useful?

Can you add a column to show Cost to the entry table?

Try Print preview.



# Further information

# Getting extra help

The IT Learning Centre offers bookable clinics where you can get pre- or post-course advice. Contact us using <u>courses@it.ox.ac.uk</u>.

# Study Videos from LinkedIn Learning

On our website, you will find our collection of self-service courses and resources. This includes providing LinkedIn Learning video-based courses free to all members of the University. Visit <u>skills.it.ox.ac.uk/linkedin-learning</u> and sign in with your Single Sign-On (SSO) credentials.

Some courses recommend pre- and/or post-course activities to support your learning. You can watch the online videos anywhere, anytime, and even download them onto a tablet or smartphone for off-line viewing.

# About the IT Learning Portfolio online

Many of the resources used in the IT Learning Centre courses and workshops are made available as Open Educational Resources (OER) via our Portfolio website at <u>skills.it.ox.ac.uk/it-learning-portfolio</u>.

Find the pre-course activity for this course in the IT Learning Portfolio: visit <u>skills.it.ox.ac.uk/it-learning-portfolio</u> and search for "Project activity".

## About the IT Learning Centre

The IT Learning Centre delivers over 100 IT-related teacher-led courses, which are provided in our teaching rooms and online, and we give you access to thousands of on-line self-service courses through LinkedIn Learning.

Our team of teachers have backgrounds in academia, research, business and education and are supported by other experts from around the University and beyond.

Our courses are open to all members of the University at a small charge. Where resources allow, we can deliver private courses to departments and colleges, which can be more cost-effective than signing up individually. We can also customize courses to suit your needs.

Our fully equipped suite of seven teaching and training rooms are usually available for hire for your own events and courses.

For more information, contact us at <a href="mailto:courses@it.ox.ac.uk">courses@it.ox.ac.uk</a>.

## About IT Customer Services

The IT Learning Centre is part of the Customer Services Group. The group provides the main user support services for the department, assisting all staff and students within the University as well as retired staff and other users of University IT services. It supports all the services offered by IT Services plus general IT support queries from any user, working in collaboration with local IT support units.

The Customer Services Group also offers a data back-up service; an online shop; and a computer maintenance scheme. Customer Services is further responsible for desktop computing services – for staff and in public/shared areas – throughout UAS and the Bodleian Libraries.

# Microsoft Project: Setting up a project

Teacher: Jean Glendinning

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# Why Microsoft Project?

- It enables you to keep track of tasks and resources
- Share that information with team members and stakeholders
- $\bullet$  Review work that you have done how did expectations match reality
- IT GIVES YOU GANNT CHARTS!
- Key to being able to do this is to set up your plan properly



#### Essentials

- Tasks you may hold these as a list in your head, a set of post-it notes on your desk or a list in Excel. They are an important beginning. You need to consider how they relate to each other and how long they will take.
- Resources who is going to do all of these tasks, when are they able to do them and what will they need to be able to complete the task?
- Calendar When do you work on this project? Every day of the week? 9 – 5? Setting you calendar to reflect the working hours and days correctly will impact on the project duration.

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Tasks

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What are the tasks that need to be done?

• You can make a list of tasks – they can be in any order, they can be sorted later - if you want

#### How do they LINK to each other?

- This is the most important aspect to get right. We usually consider things in a sequential manner
- a key feature of linking tasks is that you may need to link a task to more than one other task or DEPENDANT
- There are different types of links



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#### How long will they take?

- Estimating how long a task will take is the next thing to consider.
- To get the benefit of the software it is better to estimate the duration rather than putting an actual date for it to happen.
- Dates can change depending on what goes on before or availability of materials or resources, but the duration of the task is something that can be estimated.
- Bear in mind whether a task can be completed faster by throwing more manpower at it – or if it will take a fixed amount of time no matter how many people are doing it

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#### Set the parameters

- Open project
- Set tasks to be automatically scheduled. Either at the bottom of the pane or individual projects or for all future projects through the options screen.

#### Resources

- The are usually the people who are going to do the tasks but you can also include the materials etc.
- When you set up the list of resources if you apply a *cost per hour* or *cost per use* to them you will be able to get an estimate of the price of the project as you apply the resource to the tasks
- The cost per hour is the amount it costs you to employ them. Not their take home pay.
- Remember total derived from applying the resources will not include fixed costs etc.

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#### Calendar

- It is important to set this up as a first step. You may want to create a template file with your own working times and holidays in it which you can then reuse for every new project.
- When you are given a project plan by someone to review, check that they have put in the correct duration for a working day and if they have accounted for Public Holidays and general closure times – it can impact on the end dates of the project.

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#### Project start date

- Build an idealised plan which could be used as a template for similar projects
- When you build the plan do not put in any specific dates this means that when you set the actual start date of the plan the tasks will be able to shift automatically. If you have specified particular dates, then you will have to change each of them.

### Constraints

- Don't change the constraints from fluid ones when you are designing your project plan.
- Only add them once you have completed the plan and know when your start date is.
- Adding constraints affects how the links between tasks change
- There are 6 fixed constraint types and 2 fluid ones

| Must Finish On         | $\sim$ |
|------------------------|--------|
| As Late As Possible    |        |
| As Soon As Possible    |        |
| Finish No Earlier Than |        |
| Finish No Later Than   |        |
| Must Finish On         |        |
| Must Start On          |        |
| Start No Earlier Than  |        |
| Start No Later Than    |        |
|                        |        |