**Week 2 MS Project Homework Exercise Assignments**

N***ow is the time to install MS Project***.  To obtain Microsoft Project, please see the [Questions and Answers](https://learn.umuc.edu/d2l/common/dialogs/quickLink/quickLink.d2l?ou=86898&type=discuss&rcode=UMUC-1118803)section of our LEO classroom. Load Microsoft Project and then complete the following MS Project homework exercises.

Do *ONE* of the two following two MS Project exercises depending on which group you have been assigned.  Instructions for both exercises are below:

  -   WBS Exercise (Wedding Planning) - **Groups 1, 3, and 5;**

  -  WBS and Schedule II (MSP-1) Exercise  - [**G**](http://polaris.umuc.edu/~kschank/Student-Groups-for-Homework-Assignments.htm)**roups 2 and 4.**.

Important Note:

*This is an****individual****homework assignment,  not a team assignment..* Only one of these individual homework assignments is required.  Nobody needs to do *both* exercises.  The student groups  will be assigned by the instructor no later than Week 1.   **This assignment is *not* related to the student ITP project assignments.**.

Please read *all* the questions and feedback, posted  after grading is complete.  This will help with the following ITP assignments..

Submit homework as an Assignment by clicking on the blue Homework 1 (Wk 2) link above.

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**WBS Exercise I (Wedding Planning)**

Important Note:*Doing this exercise now will greatly help you in succeeding on the ITP projects.*

 This exercise requires both Microsoft Project AND a Word document.

Note:*Doing this exercise will require making some assumptions. Make sure to show your assumptions and explain why you made them in the Word document!*

**Note:** At each step just continue on from where you finished the previous step. Don't revert back to the beginning.

Perform ***all*** of the steps and, in the Word document, answer ***all*** of the parts of the question/exercise, below; document your assumptions that you made at every step; note the project completion date at each step; and describe your findings at every step:

**Step A --** Take the following WBS and put it into your Microsoft Project. Don't forget to add the indents! Save the file as "<yourname> G. Wedding Project File One". **ADD** durations to all tasks based on YOUR estimates of how long the tasks should take.

In your response to this question, tell us, based on your durations, how long it will take to plan the wedding and *tell us the date* that Microsoft Project tells you that you will be *finished* with the Plan the Wedding project.

Assume a **project start date of** **January 1st of this year** (or the following Monday if that was on a weekend):

1. Plan a wedding

1.1 Schedule the church

1.2 Prepare for the reception

1.2.1 Select the hall

1.2.2 Select the caterer

1.2.3 Order the cake

1.3 Invite the guests

1.3.1 Order the invitations

1.3.1.1 Buy stamps

1.3.1.2 Prepare the mailing list

Make sure to use "Automatic scheduling", not "Manual scheduling", and to enter task durations not hard-coded task dates. ("Manual scheduling" can really mess things up.).

* **Do not enter hard coded dates** (that is, dates that you enter by hand instead of letting MS Project calculate them for you), with the sole exception of the project start date.  (Note that even *that* does not mean you can enter the task date of the first task.  It means that you can set the project start date separately and explicitly in MS Project.  Hard-coding the start date of the first task is not the same as entering a project start date.)
* D**o not use "manually scheduled" tasks**.  Rather, use "automatically scheduled" tasks.  When manually scheduled, the dates are essentially hard-coded (see above) and not allowed to automatically adjust when the task durations and critical paths change.

Please flesh it out by adding a few additional tasks of your own at appropriate places in the WBS to make it more realistic. Don't get carried away, though. Don't make it overly complex. That's not the intent.

In MS Project, add a top level root task whose name is the project name (Wedding Plan), with no work in itself, and all remaining tasks (the tasks listed above and those you added) subordinate to (indented from) it.

**Step B --** Save the file again, as "<yourname> G. Wedding Project File Two".

Then, in the last lowest task (that is, the lowest level leaf node task), change the date to six months from the day you are working on the file.

Task changes like this may have to be "Manual scheduling", but still should involve only task duration changes, not hard-coded task dates.

In your narrative, please indicate which task you changed (which task was the last, lowest leaf node task), and what date you changed it to.

What happens to the other tasks? When is the Plan the Wedding project scheduled to complete?

**Step C --** Save the file again, as "<yourname> G. Wedding Project File THREE".

Then, change the date in the Prepare for the Reception task to June 15 (that is, the next June 15 after the project starts; don't change it to a date in the past). If the Prepare for Reception task is a summary roll-up group, then you may need to change its date by changing the date of a subordinate task instead.

What happens? When is the Plan the Wedding project scheduled to complete?

Which task did you change the date of? Why?

**Step D --** As you have gone through these changes, what has happened to the tasks in the Schedule/calendar area of the Gantt view?

**Step E --** NOW, save your final .mpp as "<yourname>  Wedding Project File FOUR" and post both your .mpp and your narrative (these answers) in your Assignments Folder by clicking on Homework 1 (Wk 2) above..

Realizing that there will be differences between submissions, what do you think causes the differences among classmates using the same WBS? How do you think this might affect your team efforts as you work with your team's WBS and Microsoft Project as we go through the semester?

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**WBS and Schedule II**

Important Note:*Doing this exercise now will greatly help you in succeeding on the ITP projects.*

*This exercise requires both Microsoft Project AND a Word document.*

**Note:** At each step just continue on from where you finished the previous step. Don't revert back to the beginning. Also, just submit this homework exercise once at the end of the sequence (step N). You need not submit multiple copies after each group of steps. Just once at the end.

1. 1.       Enter the following project into MS Project, **with project start date of January 1st of this year** (or the following Monday if that was on a weekend):

|  |  |  |
| --- | --- | --- |
| **Task Name** | **Duration** | **Successors** |
| A | 2 | B, C |
| B | 5 | D, E |
| C | 8 | F |
| D | 8 | H |
| E | 4 | G |
| F | 2 | H |
| G | 6 | I |
| H | 4 | I |
| I | 1 | -- |

*Note: Yes, those are successors, not predecessors.*

In MS Project, add a top level root task whose name is the project name (MSP-1), with no work in itself, and all remaining tasks (the tasks listed above and those you added) subordinate to (indented from) it.

Make sure to use "Automatic scheduling", not "Manual scheduling", and to enter task durations not hard-coded task dates. ("Manual scheduling" can really mess things up.

* **Do not enter hard coded dates** (that is, dates that you enter by hand instead of letting MS Project calculate them for you), with the sole exception of the project start date.  (Note that even *that* does not mean you can enter the task date of the first task.  It means that you can set the project start date separately and explicitly in MS Project.  Hard-coding the start date of the first task is not the same as entering a project start date.)
* **Do not use "manually scheduled" tasks**.  Rather, use "automatically scheduled" tasks.  When manually scheduled, the dates are essentially hard-coded (see above) and not allowed to automatically adjust when the task durations and critical paths change.

1. 2.       Peruse the Tracking Gantt chart view with predecessor/successor links shown and with the critical path highlighted in red.
2. 3.       Peruse the network diagram view with the critical path highlighted in red.
3. 4.       Save a copy of it with a file name of "<yourname> H1.mpp".
4. 5.       What is the total work duration of the whole project? (i.e., the sum of the durations of the tasks along the critical path.)
5. 6.       What is the critical path of this project? (i.e., list the tasks on the critical path of this project in order.)
   1. 7.       Suppose (wonder of wonders*!*) that task D actually finishes early*!* Change its duration to 6 in MS Project. Save the changed file with a file name of "<yourname> MSP-H2.mpp".

Task changes like this may have to be "Manual scheduling", but still should involve only task duration changes, not hard-coded task dates.

1. 8.       Did this change the work duration of the project? If so, what is the project work duration now?
2. 9.       What is the critical path of this project now? (i.e., list the tasks on the critical path of this project in order.)
   1. 10.   Suppose task F runs late. Change its duration to 6 in MS Project. Save the changed file with a file name of "<yourname> MSP-H3.mpp".
   2. 11.   Did this change the work duration of the project? If so, what is the project work duration now?
   3. 12.   What is the critical path of this project now? (i.e., list the tasks on the critical path of this project in order.)
      1. 13.   Suppose task G runs late. Change its duration to 8 in MS Project. Save the changed file with a file name of "<yourname> H4.mpp".
      2. 14.   Did this change the work duration of the project? If so, what is the project work duration now?
      3. 15.   What is the critical path of this project now? (i.e., list the tasks on the critical path of this project in order.)
3. 16.   What version of MS Project did you use for this?

Submit the .mpp file(s) and the Word document by clicking on Homework 1 (Wk 2) above.. The "after" version (steps 13-15) is most important for showing your work and results.