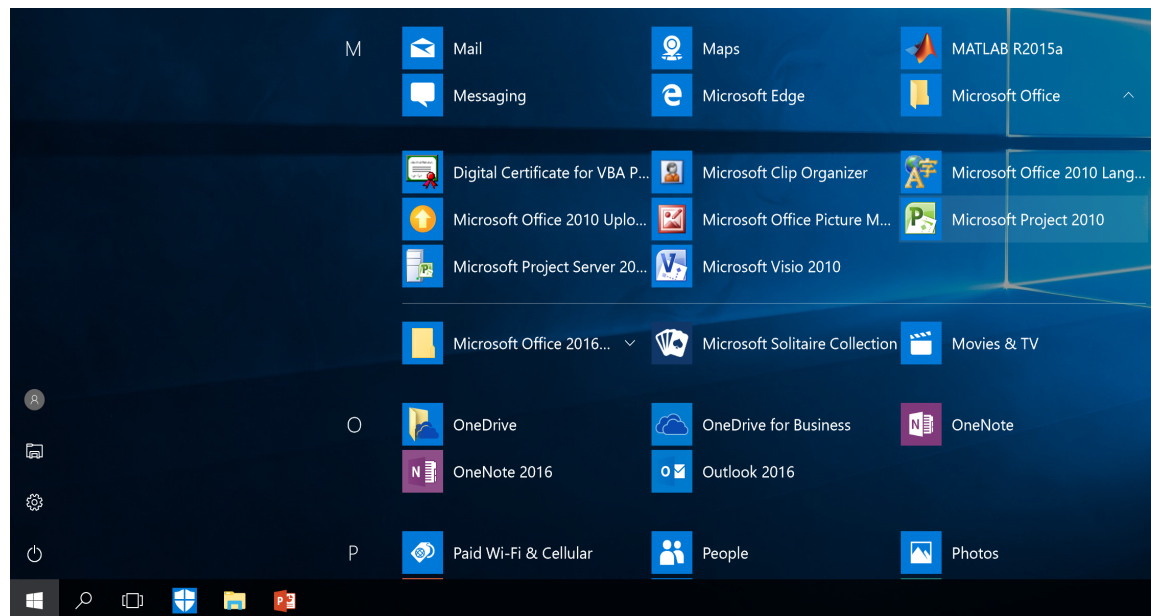# CENG 6101 Project Management

Lab Session

MS Project 2010

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MS Project 2010: Introduction

- Project management software programs such as Microsoft Project 2010 can be used for:
  - Developing the project schedule and budget
  - Tracking actual versus planned progress
- Launch MS Project 2010:

MS Project 2010
Project Environment

Quick Access Toolbar

Minimize Ribbon
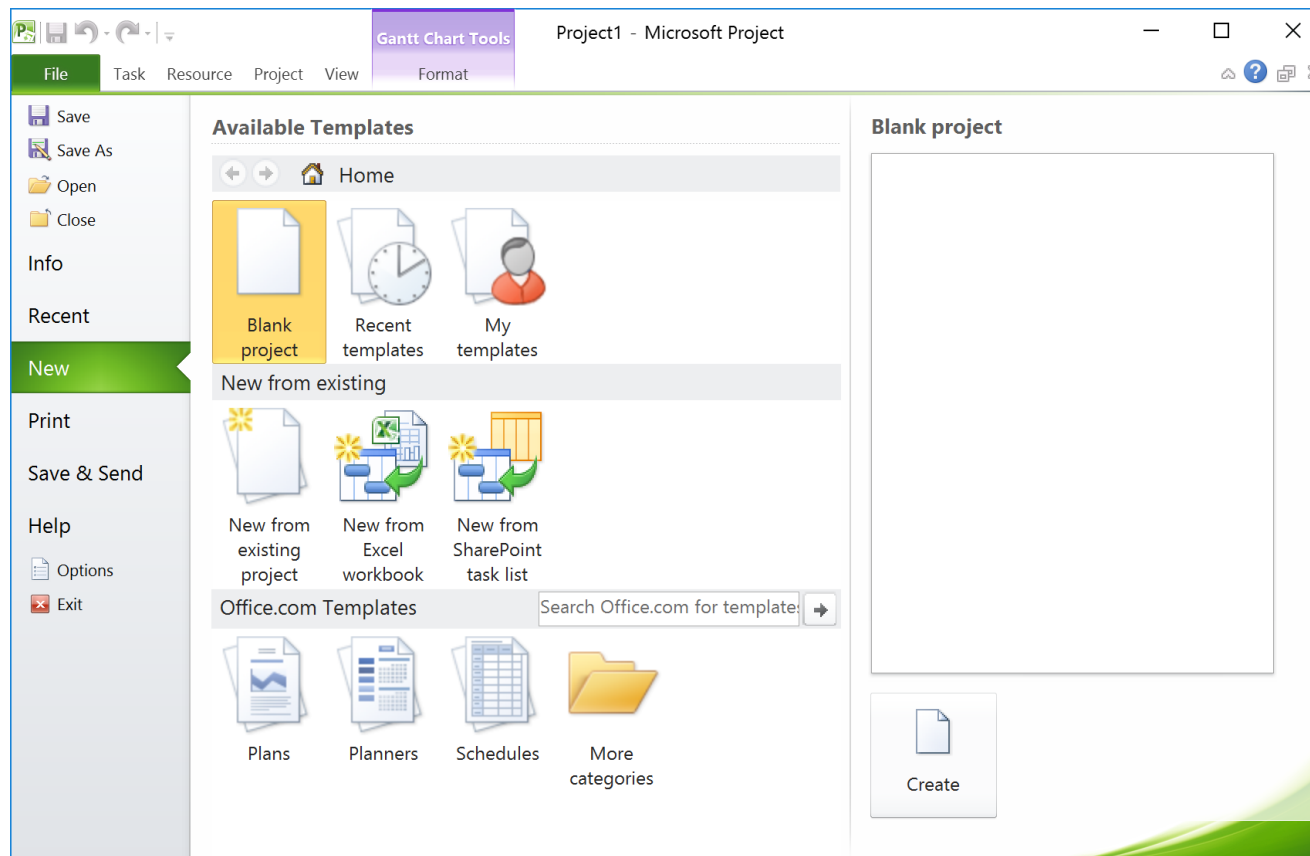
Ribbon

Timescale

Default View: Gantt Chart

View Buttons

MS Project 2010: Creating a Project
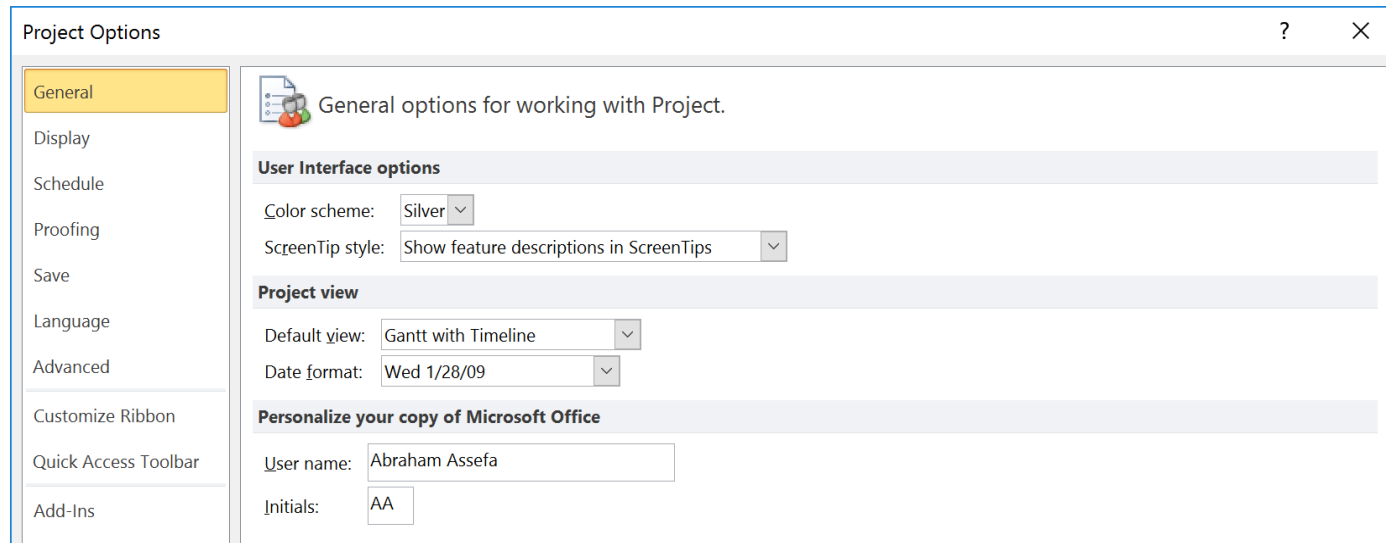
I. Creating a Project

- From: Blank project, Template, Existing project, Excel
- Select "Blank project" and click "Create"

MS Project 2010: Creating a Project

- Select File, Options

- Click on "General" tab
  - For Default view:
    - Select "Gantt with Timeline"
- Click on "Display" tab
  - For Currency option for this project:
    - Select "ETB"

MS Project 2010: Creating a Project

- Click on "Schedule" tab
  - For Calendar options for this project:
    - Select "Project 1"
  - For Scheduling options for this project:
    - Select "Project 1"
  - For New Tasks Created:
    - Select "Manually Scheduled"
  - For Duration is entered in:
    - Select "Days"
- For default task type:
  - Select "fixed duration"
- Make sure New tasks are effort driven is NOT checked
- Click OK when finished

MS Project 2010: Creating a Project

MS Project 2010: Creating a Project

- Click on Project, Project Information, select Wed 1/11/17 as the Start date, click OK

| Project Information for 'Project1'			✕
Start date:	Wed 1/11/17 ⌄	Current date:	Tue 1/10/17 ⌄
Finish date:	Wed 1/11/17 ⌄	Status date:	NA ⌄
Schedule from:	Project Start Date ⌄	Calendar:	Standard ⌄
All tasks begin as soon as possible.		Priority:	500 ⌄
Enterprise Custom Fields			
Department:	⌄		
Custom Field Name		Value	⌃

- Click on File, Save as, type in project name such as Project1, click OK
- Your project is saved as Project1.mpp

MS Project 2010: Project Calendar

II. Assigning a Project Calendar

- Project default base calendars: Standard, 24 Hours, Night Shift
- From "Project" tab, click "Changing Working Time"

MS Project 2010: Project Calendar

- **Assigning a Project Calendar**
  - Select "Create New Calendar"
  - Enter a name for the calendar
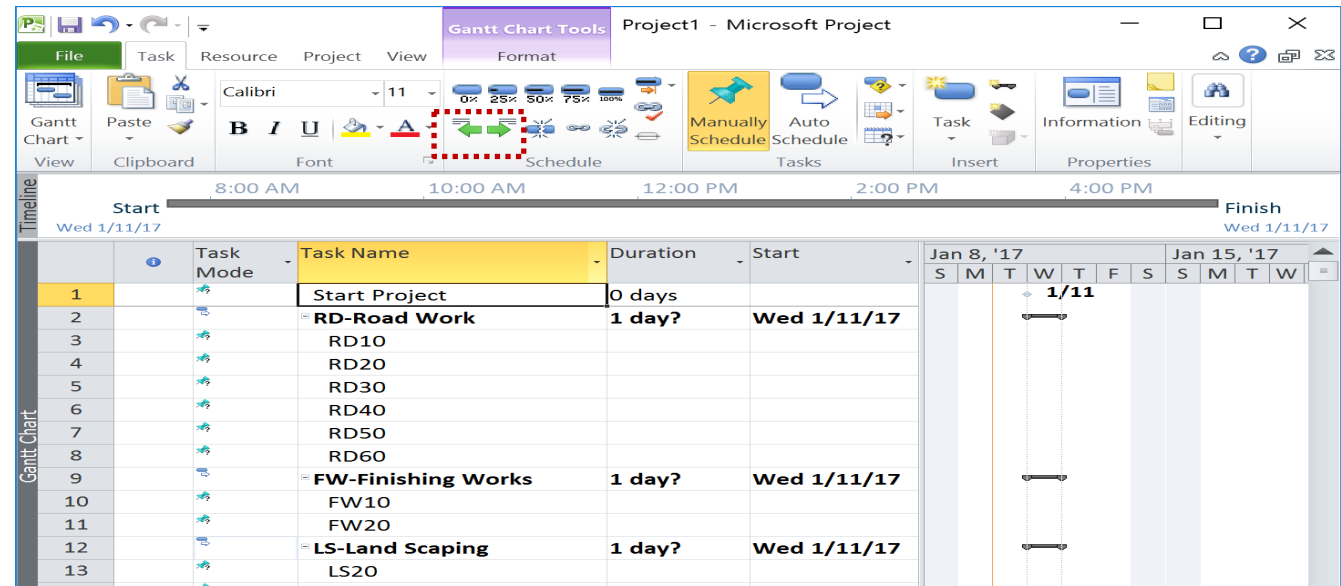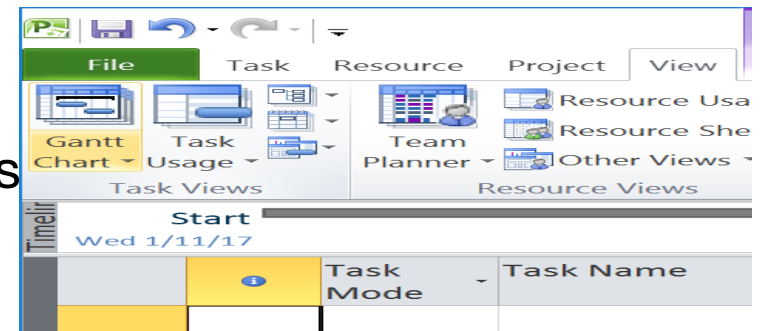 - Add details
  - Assign calendar to Project 1
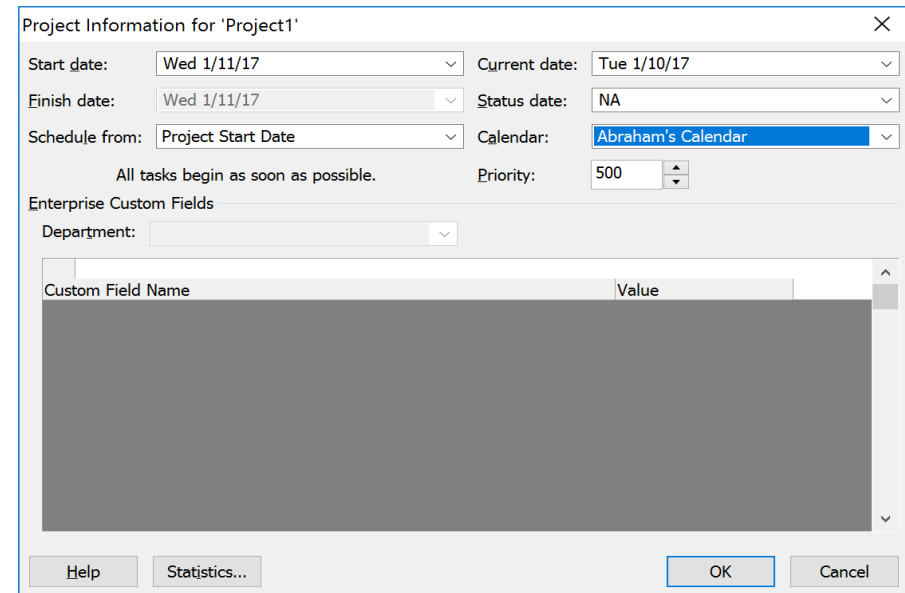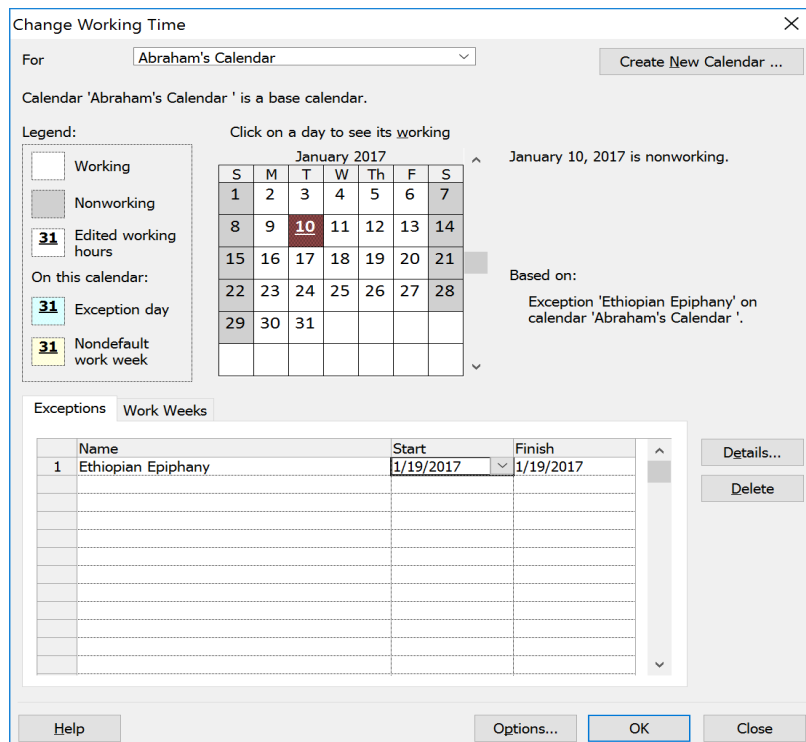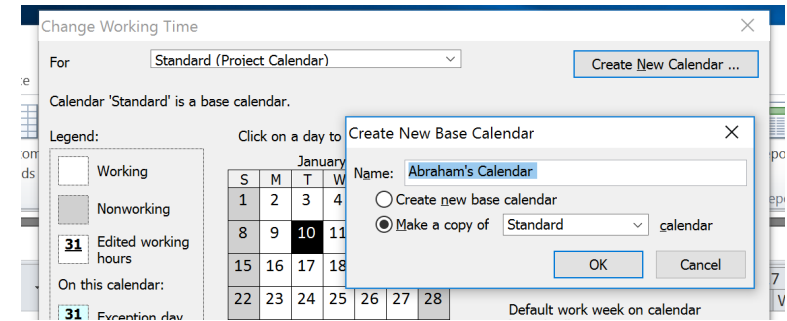
Example Project

Activity ID	Activity Name	Duration	Predecessor			Resources
			Activity ID	Relationship	Lead/Lag	
RD-Road Work						
RD10	Bulk excavation	7				Dozer, Foreman
RD20	Sub Base for Road	4	RD10	FS	0	Dozer, Gravel, Foreman
RD30	Base-course for Road	4	RD20	SS	2	Grader, Lime, Foreman
RD40	Prime Coat for Road	1	RD30	FS	0	Spreader, Bitumen, Foreman
RD50	50 mm Asphalt for Road Layer I	2	RD40	FS	0	Paver, AC, Foreman
RD60	50 mm Asphalt for Road Layer II	2	RD50	FS	0	Paver, AC, Foreman
FW-Finishing Works						
FW10	Install Signs	1	RD60	SS	0	Excavator, Signs Foreman
FW20	Pavement Marking	1	RD60	SS	1	Marker-machine, Paint, Foreman
			FW10	FF	0	
LS-Land Scaping						
LS20	Seeding	2	RD60	FS	0	Seeder, Seeds, Foreman
LS10	Sidewalks	4	RD60	FS	0	Concrete-paver, Concrete, Foreman
			LS20	FF	0	
			FW20	FF	0	

MS Project 2010: Task and WBS

III. Creating a Task List and WBS

- 1. Adding Tasks:
- In "View" tab, click on "Gantt Chart"
- Add Project "Start" and "Finish" milestones
- Type each task (Summary and subtask)
- 2. Organizing Tasks:
- Once all tasks are added, use the "Indent" or "Outdent" buttons to organize tasks

III. Creating a Task List and WBS

- 3. Work Breakdown Structure:

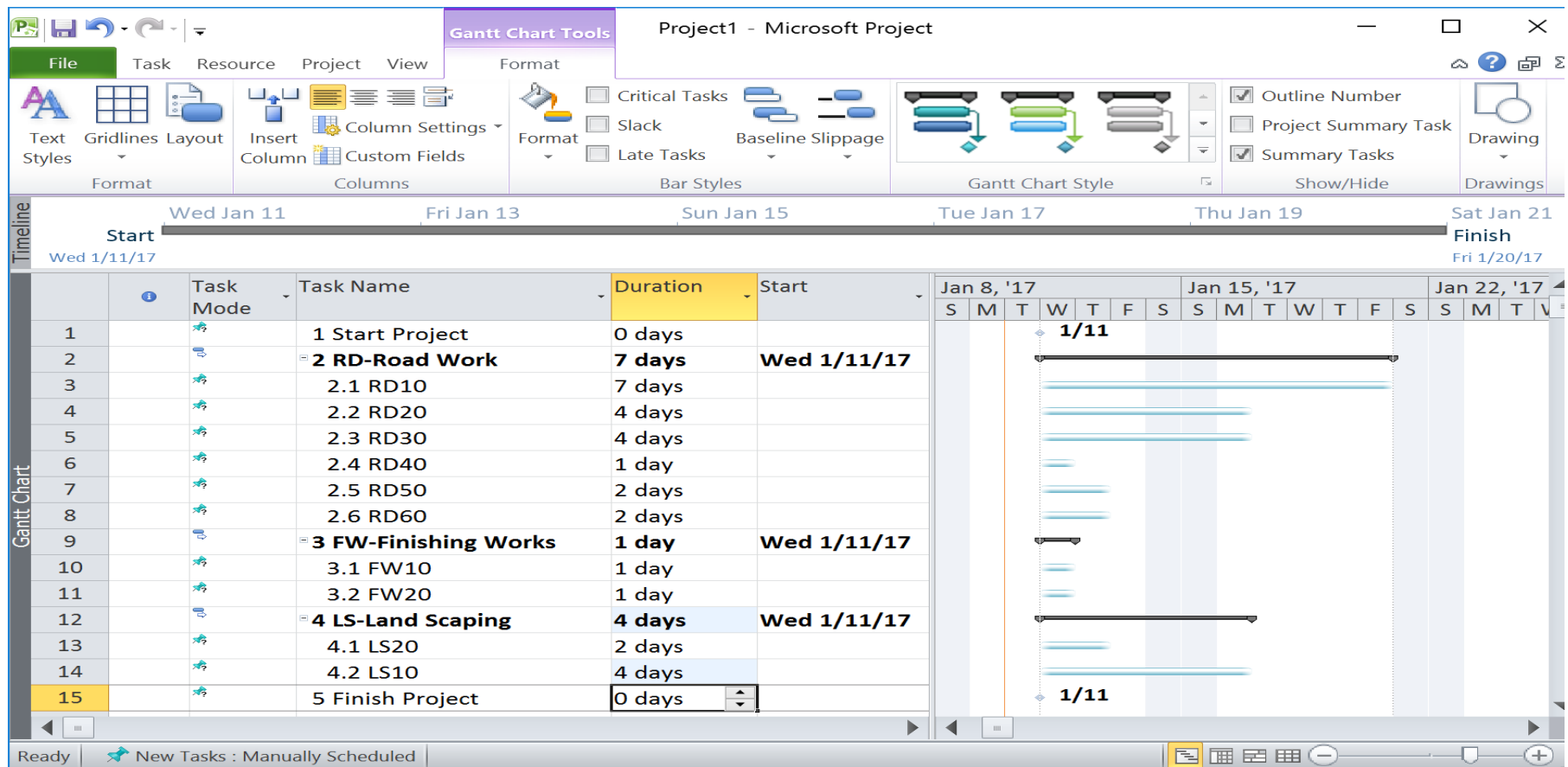- To view WBS, under the "Format" tab, check the "Outline Number" box

III. Creating a Task List and WBS

- 4. Enter Durations:

- Enter the duration of each subtask (activity)

IV. Creating Dependencies

- Option 1: Using Link tasks icon
- Select the two activities (RD10 and RD 20) to be linked and click the "Link Tasks" icon under the "Task" tab.

IV. Creating Dependencies

- Option 2: Using Task information

- Double click the succeeding activity (RD20), and in the "Task Information" window insert the predecessors and also the type of relationship.

- Insert dependencies for all activities using Option 2.

IV. Creating Dependencies

V. Resources

- Resources are categorized into four types: Work (people or equipment), Material (concrete, paint, etc.), Cost (airfare, camp cost), and Budget (Project-level work, material, and cost resources).

- From "View" tab, choose "Resource Sheet"

- Enter each resources for each activity.

V. Resources

MS Project 2010: Resource Loading

V. Resources

- Assign Resources to Tasks: In the "Gantt Chart" view, under the "Resource Name" column, select the appropriate resource(s) for each task

MS Project 2010: Resource Loading
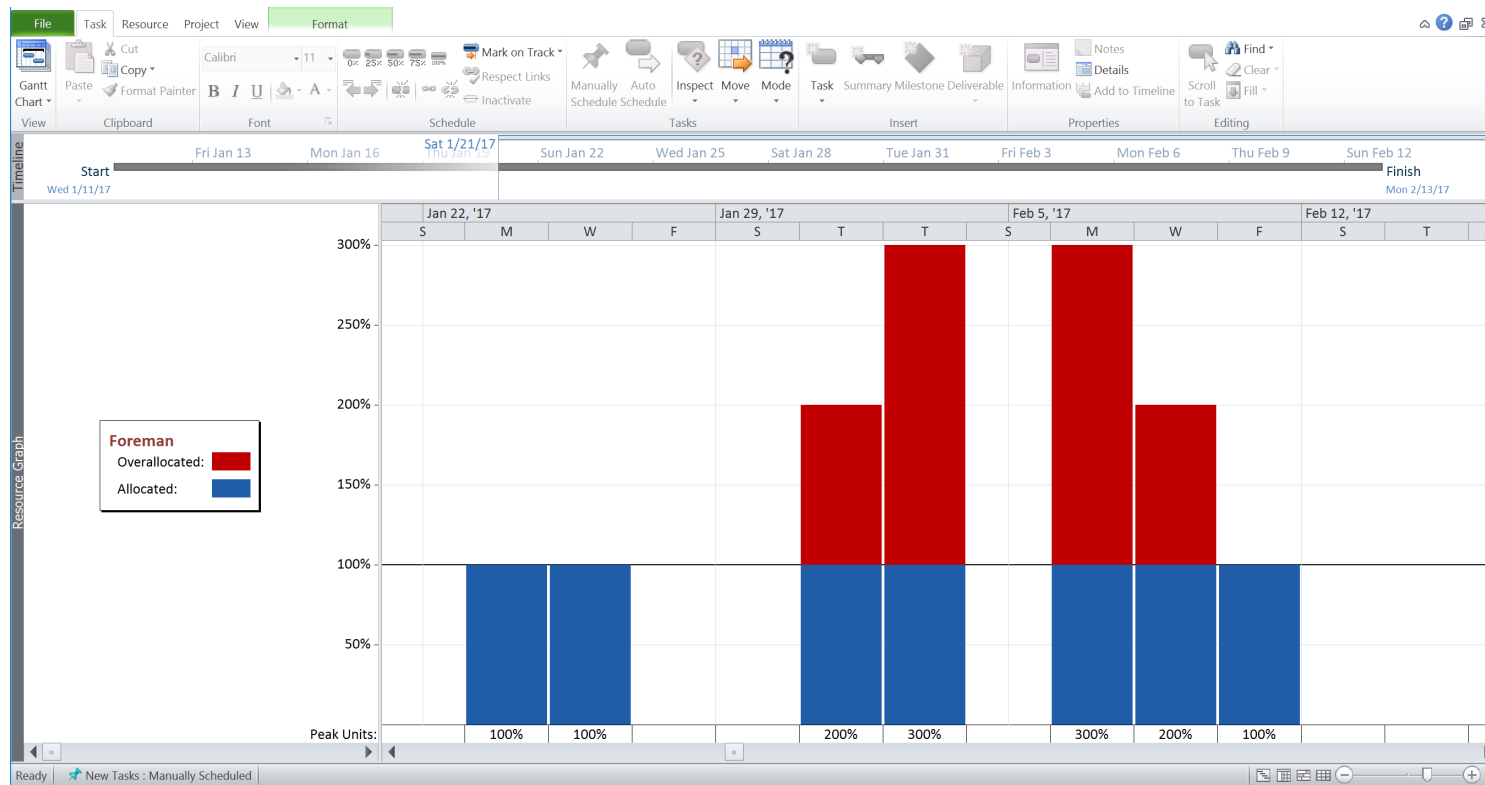
V. Resources

- Assigned resources:
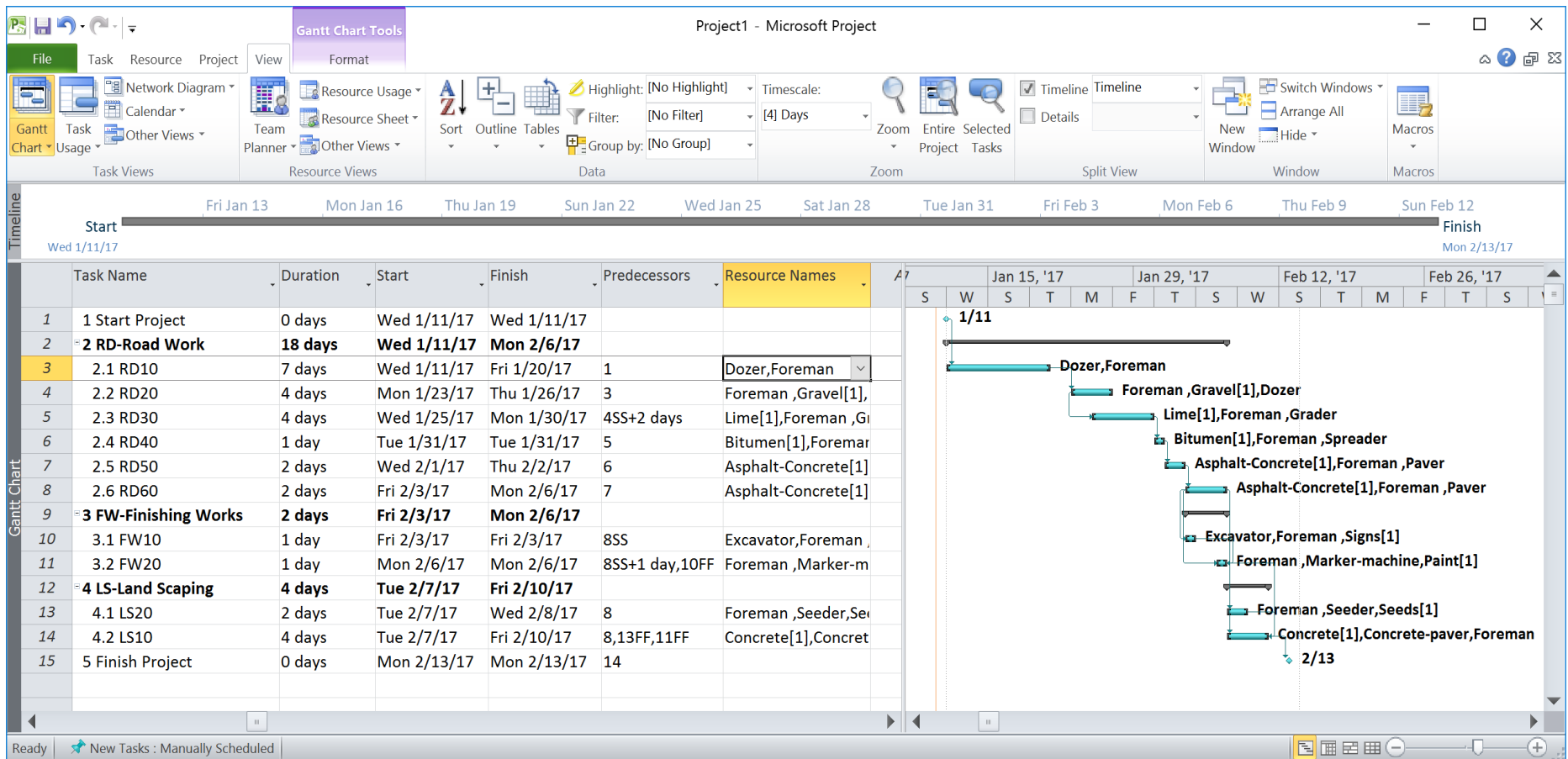
MS Project 2010: Resource Allocation
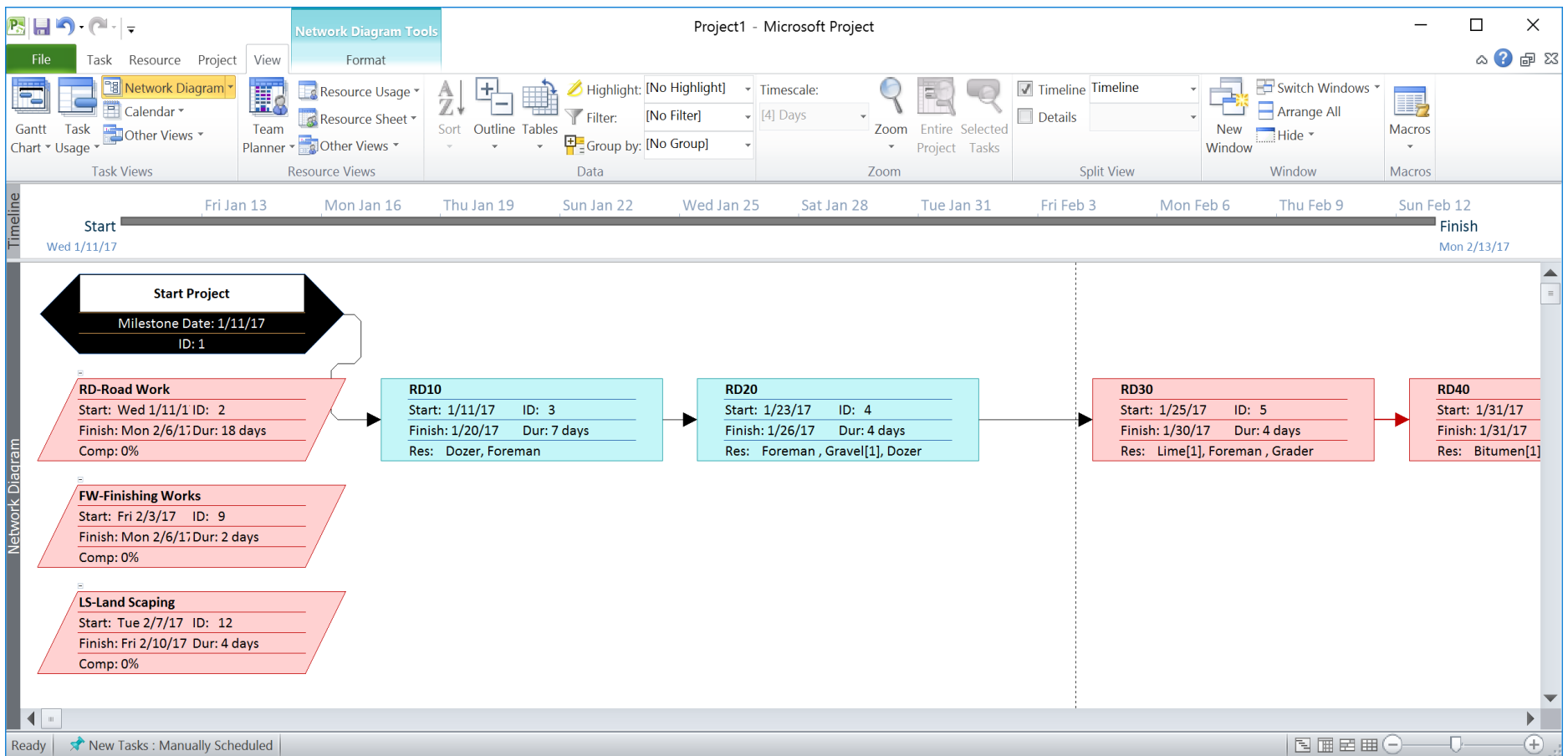
V. Resources

- Review Resource Allocations: E.g. Foreman

- Under "Task" tab, select the "View" dropdown menu, and choose "Resource Graph". Using the Tab on the left window, select the different resources and review their allocation.
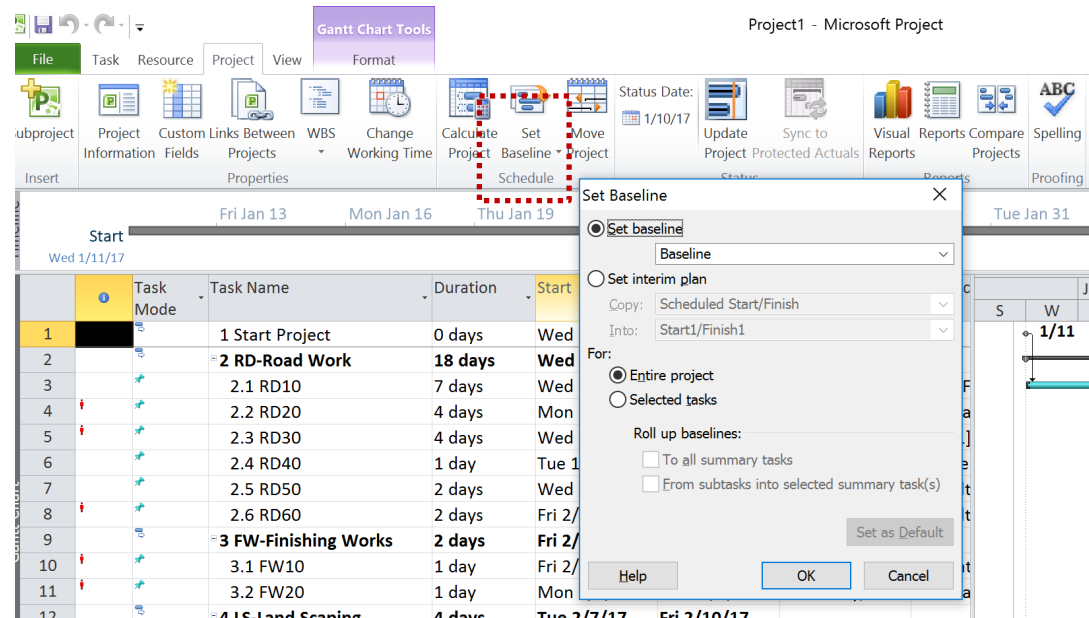
VI. CPM Analysis Results

- MS Project will run a CPM analysis.

- View AON diagram by selecting "Network Diagram" in "View" tab.
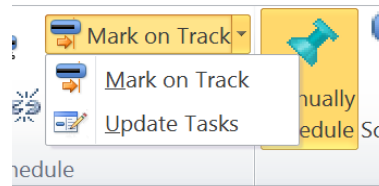
VII. Tracking Progress

- 1. Set a Baseline

- MS Projects uses Baselines Schedules to evaluate project progress.

- Baseline schedules copy the project plan before anything is done.
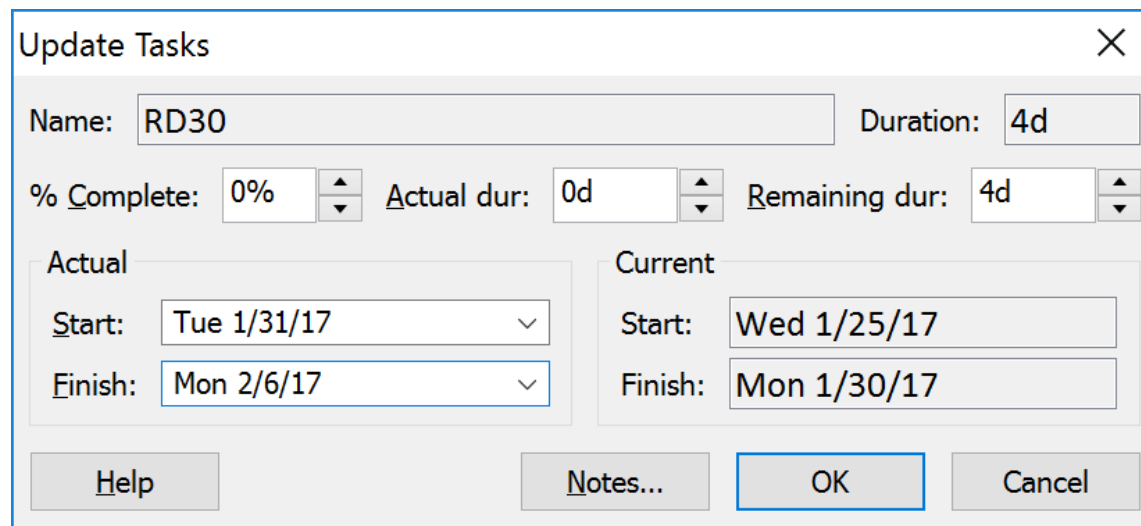
- Under "Project" tab, click "Set Baseline"

VII. Tracking Progress

- 2. Update tasks

- Under "Task" tab, click to highlight the task to be undated, and "Mark on Track" in "Schedule Box", and then click "Update Tasks"
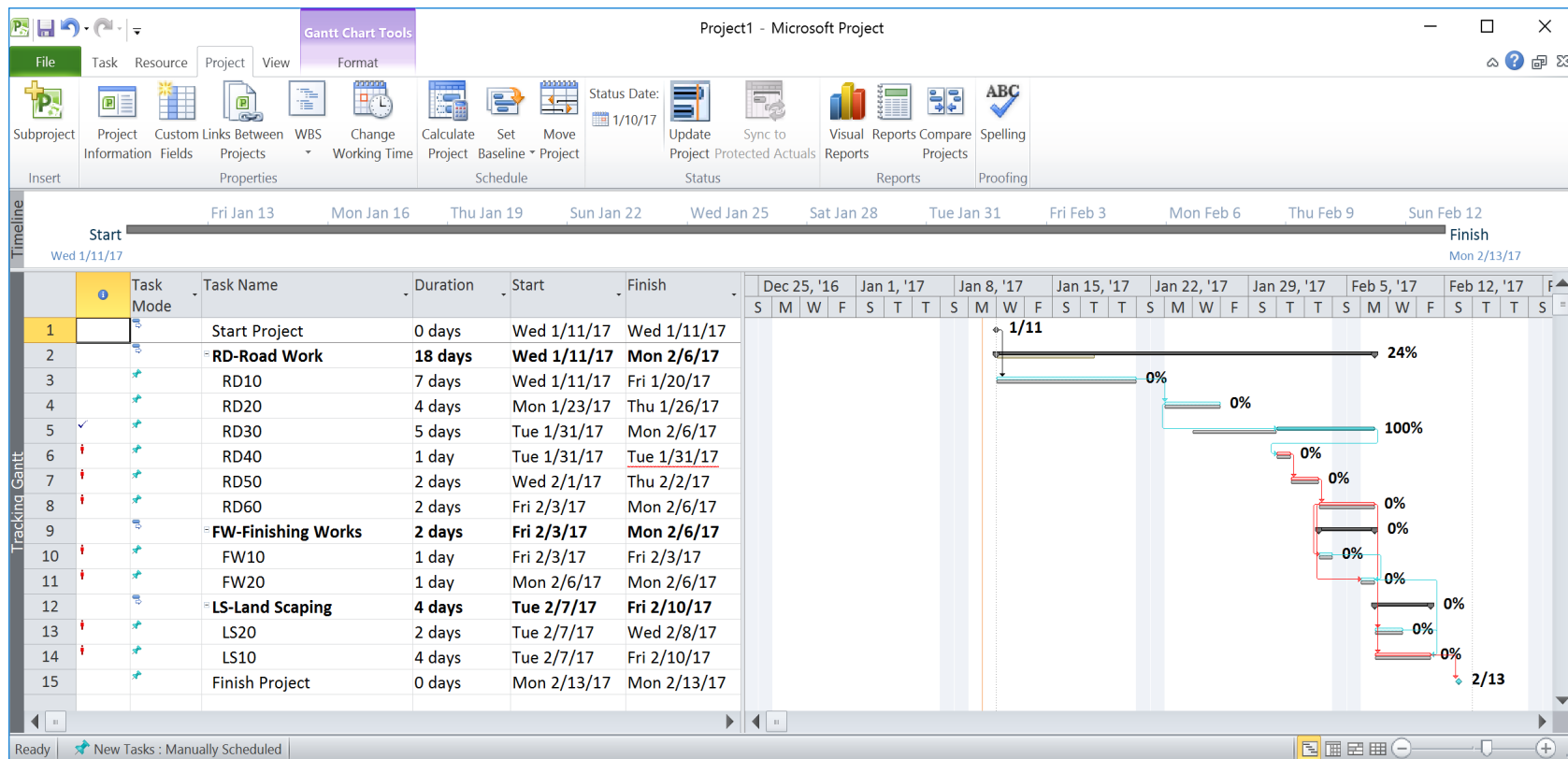

- Update the "Actual Start" and "Finish Dates"

VII. Tracking Progress

- 2. Monitoring Task Progress

- To view the progress, under the "Task" tab, click the "View" dropdown menu and select "Tracking Gantt".

VIII. Printing Reports

- MS Project provides a number of built-in reports.

- From the "Project" tab, in the "Reports" category, select "Reports"

Assignment 3

- Assignment 3: MS Project Lab Session

- Complete the lab exercise and provide answers for the questions given the lab session handout.

- Due date: Wednesday, January 18, 2017 before 5 p.m.