

Project management concepts and definitions, project management processes. National & International PM standards. Project management cycle – projects and business strategy. Organisational structures. Project Manager – Project Management Office. Staff motivation. Scope management – Work Breakdown Structure. Time management – Gantt - CPM – total and free slack – uncertainty in estimations – PERT. Cost management – Cash flows – Time phased budget - Earned Value Management (EVM). Resource management – resource allocation – Project risk management. Stakeholder & communication management – RACI – responsibility assignment matrix. Laboratory / PM software: Introduction to project management software. Define activities. Enter activities, durations, dependencies. Calculate project duration, structure the project in phases, milestones, critical path. Resource loading. Costs. Baseline schedule – monitor actual progress. Types of activities, Person-hours. Resource availability, resource allocation, resource leveling. Reporting. Network diagram. Calendars. Lead/lag times. Earned Value Management.