# PMGT 350: Project Management — The Project Management Trifecta

*Project Management, Agile, and Lean Six Sigma*

Fall Semester 2026 | 3 Credit Hours | 15-Week Course + Finals Week

## Course Description

This course introduces students to project management as an integrated discipline, drawing on three complementary frameworks: traditional Project Management (PM), Agile, and Lean Six Sigma (LSS). Rather than treating these as competing methodologies, the course presents them as the "Project Management Trifecta" — three foundations that together equip project managers to handle the full range of project complexity encountered in practice. Students progress through the traditional PM life cycle, Agile methodologies and ceremonies, and Lean Six Sigma's data-driven DMAIC process, culminating in an integrated capstone project.

## Required Text

McClamb, S. L. H. Managing Project ComplexITy Using The Project Management Trifecta: Project Management, Agile, and Lean Six Sigma.

## Course Learning Objectives

- Explain the phases of the traditional project management life cycle, from Initiation through Close.
- Develop core PM artifacts, including a Business Case, Statement of Work, Project Charter, WBS, schedule, budget, and risk register.
- Differentiate "being Agile" from "doing Agile" and apply Agile values and principles to project scenarios.
- Compare and apply Agile methodologies, including Scrum, Kanban, Extreme Programming, Crystal, FDD, DSDM, and APF.
- Apply the DMAIC framework and core Lean Six Sigma tools (SIPOC, Fishbone, Pareto, FMEA, Control Charts, and others) to process-improvement problems.
- Integrate PM, Agile, and Lean Six Sigma approaches to select the right tool set for a given project's complexity.

## Grading Breakdown

| Assessment Component | Weight | Aligned To |
|---|---|---|
| Participation & Weekly Activities | 10% | Weeks 1–15 |
| Quizzes (3 @ 5% each) | 15% | Ch. 1–2, Ch. 3, Ch. 4 |
| PM Artifacts Portfolio (Charter, WBS, Schedule, Risk Register) | 20% | Ch. 2 |

| Assessment Component | Weight | Aligned To |
|---|---|---|
| Midterm Exam | 15% | Ch. 1–2 |
| Agile Simulation (Sprint/Kanban Exercises) | 15% | Ch. 3 |
| Lean Six Sigma Lab (DMAIC Application) | 15% | Ch. 4 |
| Final Integrated Capstone Project & Presentation | 10% | Ch. 5 |

*Grading Scale: A (93–100) | A– (90–92) | B+ (87–89) | B (83–86) | B– (80–82) | C+ (77–79) | C (70–76) | D (60–69) | F (below 60)*

## Weekly Course Schedule

*Chapter and page references below correspond to the required text. Instructor reserves the right to adjust pacing as needed.*

| Week | Topic | Readings (Text) | Assignments / Activities |
|---|---|---|---|
| 1 | Course Intro & The PM Trifecta | Ch. 1: Trifecta Introduction (pp. 17–21); Fig. 1 | Syllabus review; discussion: "Why three frameworks instead of one?" Reflection post on prior PM/Agile/LSS experience. |
| 2 | The PM Life Cycle & Initiation I | Ch. 2: PM Phases; Business Case; Feasibility Study (pp. 22–30) | Draft a one-page Business Case for a project of your choice. |
| 3 | Initiation II – SOW & Project Charter | Statement of Work; Project Charter (pp. 30–37) | Team activity: build a Project Charter using the sample template (Fig. 13). |
| 4 | Planning I – Scope & WBS | Planning; Work Breakdown Structure (pp. 38–48); Fig. 19–20 | Individual assignment: Create a 3+ level WBS for your team project. |
| 5 | Planning II – Scheduling & Budgeting | Project Schedule; Costs and Budget (pp. 49–67) | Build a project schedule with milestones; PERT three-point estimate exercise. |
| 6 | Planning III – Stakeholders, Risks & Issues | Stakeholders; Risks and Issues (pp. 68–82) | Stakeholder analysis matrix and risk register for team project. Quiz 1 (Ch. 1–2). |
| 7 | Execution, Monitoring, Controlling & Close | Execution/Monitoring/Controlling; Project Close (pp. 83–90) | Case study discussion. Midterm Exam covering Ch. 1–2. |
| 8 | Agile Foundations – Being vs. Doing Agile | Ch. 3: Agility Built-In; Declaration of Interdependence; Agile Manifesto (pp. 91–105) | Reflection: compare Waterfall (Fig. 56) vs. Agile (Fig. 57) using your own project. |
| 9 | Agile Methodologies I – Scrum | Scrum Methodology (pp. 106–113); Tables 5–9 | Simulated two-week sprint-planning exercise modeled after Fig. 60–61. |
| 10 | Agile Methodologies II – Kanban & XP | Kanban; Extreme Programming (pp. 114–123) | Build a Kanban board (physical or digital); calculate WIP limits (Fig. 66). |

| Week | Topic | Readings (Text) | Assignments / Activities |
|---|---|---|---|
| 11 | Agile Methodologies III – Crystal, FDD, DSDM, APF | Crystal; FDD; DSDM; APF (pp. 124–137) | Group presentations: pitch which Agile framework fits a given scenario. Quiz 2 (Ch. 3). |
| 12 | Lean Six Sigma Foundations & DMAIC Overview | Ch. 4: What Is LSS?; Belts; History; DMAIC (pp. 138–153) | Belt-level roles activity: map a process to the DMAIC phases (Fig. 81). |
| 13 | LSS Tools I – Voice of Customer & Root-Cause Analysis | SIPOC, IPO, Swim Lane, Pareto, CTQ Tree, 5 Whys, Fishbone (pp. 154–169) | Root cause analysis lab: build a Fishbone Diagram and 5 Whys for a real-world process problem. |
| 14 | LSS Tools II & Organizational Application | Control Charts, 5S, Kanban Board, Kaizen, FMEA; Culture & Business Results (pp. 170–201) | FMEA worksheet for team project; short paper on LSS challenges and success factors. |
| 15 | Bringing It All Together – The Integrated Trifecta | Ch. 5: Bringing Them All Together (p. 202–end); Table 19 PMP/DMAIC Comparison | Final team presentations applying PM, Agile, and LSS to a single project scenario. Quiz 3 (Ch. 4). |
| 16 | Finals Week | Comprehensive review | Final Exam and Final Project Report due. |

## Course Policies

- Attendance: Regular attendance and participation are expected each week, including in-class exercises and team activities.
- Late Work: Assignments submitted after the due date will be penalized unless prior arrangements are made with the instructor.
- Academic Integrity: All work must be original. Violations of the academic integrity policy will be handled per institutional policy.
- Teamwork: Several assignments are completed in project teams; peer evaluations may factor into individual grades.
- Accommodations: Students requiring accommodations should contact the instructor and the appropriate campus office during the first week of class.