1. Business Domain Modeling

- Purpose: Understand the problem's broader context (organization, domain, and process improvements)(Business Domain Modelin...).
- Approaches:
    - Eriksson & Penker: Business vision, process, structure, and behavior (Business Domain Modelin...).
    - Jacobsen: Business use case modeling with UML(Business Domain Modelin...).
- Key Focus:
    - Define a common vocabulary early to prevent misunderstandings(Business Domain Modelin...).
    - Compare business models (specific to an organization) vs. domain models (independent abstractions for reuse across applications)(Business Domain Modelin...).

2. Unified Process (RUP) Phases

- Inception (What to Build):
    - Focus: Vision, high-level requirements, and business case(Module 1 - Part 1 - Inc...).
    - Key Deliverables: Vision document, initial use case catalog(Module 1 - Part 1 - Inc...).
    - Scope Management: Reduce risk by identifying key requirements and managing changes(Module 1 - Part 1 - Inc...).
- Elaboration (How to Build):
    - Focus: Detailed requirements (~80%), stable architecture(Module 1 - Part 2 - Ela...).
    - Key Deliverables: More complete use case catalog, architecture baseline (Module 1 - Part 2 - Ela...).
    - Address risks: Business, technical, team, and tool-oriented risks(Module 1 - Part 2 - Ela...).

3. Needs, Features, and Requirements

- Needs:
    - Reflections of business or operational problems(Module 2 - Part 1 - Nee...).
    - Can be vague; understanding them helps define the true nature of the problem(Module 2 - Part 1 - Nee...).
- Features:
    - High-level system services to fulfill stakeholder needs(Module 2 - Part 1 - Nee...).
    - Features are identifiable, but not directly implementable(Module 2 - Part 1 - Nee...).
- Problem Analysis Heuristics:
    - Agreement on problem definition(Module 2 - Part 1 - Nee...).
    - Understanding root causes through techniques like the 5 Whys(Module 2 - Part 1 - Nee...).
    - Identify stakeholders, end-users, and system constraints(Module 2 - Part 1 - Nee...).

4. Key Tools and Techniques

- Traceability: Linking needs to features and requirements(Module 2 - Part 1 - Nee...).
- Root Cause Analysis: Techniques like fishbone diagrams and Pareto charts to identify underlying issues(Module 2 - Part 1 - Nee...).

5. Common Pitfalls to Avoid

- Inception: Avoid too much formality and analysis paralysis(Module 1 - Part 1 - Inc...).
- Elaboration: Time-box the work to avoid perfectionism and scope creep(Module 1 - Part 2 - Ela...).