**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…).