

ERP Course Exam Questions (syllabus)

SW7

Exam: January 27, 2009

Consultation: January 23, 2009

The ERP course exam will be a regular oral exam with the final grade according to a regular scale. Each course participant will be examined individually for 20 minutes. You will pick up the questions from the following list (syllabus). Prepare a presentation for those. You will be allowed to bring your notes. Pictures from the slides will be printed and available at the exam. Utilize your experience from exercises in the preparation for your questions. The documentation from your mini project can serve for further questions and should summarize the results and the reflections from the exercises. Please use also the knowledge gained at the lectures for your reflections in mini project and in presentations for the questions. The learning material consists of lecture slides, the main book as well as the literature provided to you as additional literature. Mini project will serve as an input to the exam. The deadline for handing in miniproject is December 5, 2008. Place 2 copies (one for me and one for censor) per each working group into my mailbox. The notes on the mini project will be used for further discussions at the exam. Typical presentation at the exam contains:

- conceptual knowledge on ERP topics from syllabus (as picked from the list)
- examples on the concepts from your experience for example in exercises and with OpenERP/TinyERP
- reflections on your practice from ERP domains, software development, analysis patterns, workflows, and enterprise application integration perspectives

The questions are:

- 1) Sales and Marketing in ERP
Keywords: Sales Lead, Prospecting, Customer need identification, proposal, closing, deal transaction, marketing campaigns, Sales and Marketing in OpenERP
Reading: Chapter 4 from Mary Sumner
- 2) Accounting and Finance in ERP
Keywords: Accounts receivable and payable, assets, liabilities, journal, general book of accounts, types of accounts, accounting management processes, Accounting and Finances in OpenERP
Reading: Chapter 5 from Mary Sumner, Soeren Lauesen: Datalogens Introduktion til Bogholderi
- 3) Production and Material in ERP
Keywords: inventory, production planning, production execution, production management processes, Production and Material in OpenERP
Reading: Chapter 6 from Mary Sumner
- 4) Human Resources in ERP
Keywords: hiring, firing, training, compensations and benefits, human resource department management processes, Human Resources and OpenERP
Reading: Chapter 7 from Mary Sumner
- 5) Supply Chains and ERP

- Keywords: goals of supply chain management, partnership, coordination, eProcurement, Supply Chain and OpenERP
Reading: Chapter 9 from Mary Sumner
- 6) Reengineering vs. Customization
Keywords: business processes, processes in connection to ERP modules, metrics for processes, erp customization technologies, phases in and design models used in erp implementation, OpenERP Customization (Forms, Database, Reports), trade-off between customization and business process reengineering
Reading: Chapter 2 from Mary Sumner
Article: Varun Grover and Manoj K. Malhotra: [Business process reengineering: A tutorial on the concept, evolution, method, technology and application.](#)
Journal of Operations Management Volume 15, Issue 3, August 1997, Pages 193-213
- 7) Managing and Development in ERP Projects
Keywords: Development process, Contrast with agile erp projects, Risk management: types of Failures, risk Factors, solutions to minimize risks
Reading: Chapter 3 and Chapter 8 Mary Sumner, Article: Gerard Meszaros, Janice Aston: [Agile ERP: "You don't know what you've got 'till it's gone!"](#).AGILE 2007: 143-149
- 8) Analysis Patterns for Accountability
Keywords: Party, Party Hierarchies, Rules, Relations, Accountability Patterns in OpenERP
Reading: Chapters 2 from Martin Fowler: [Analysis Patterns: Reusable Object Models](#). Addison Wesley
- 9) Analysis Patterns for Accounting
Keywords: Account, Entry, Transaction, Calculations, Account Types, Accounting Patterns in OpenERP
Reading: Chapter 6 from Martin Fowler: [Analysis Patterns: Reusable Object Models](#). Addison Wesley, paper Soeren Lauesen: Datalogens Introduktion til Bogholderi
- 10) Analysis Patterns for Planning
Keywords: Plan, Action, Action Types, Protocol, Resources, Planning Patterns in OpenERP
Reading: Chapters 8 from Martin Fowler: [Analysis Patterns: Reusable Object Models](#). Addison Wesley
- 11) Analysis Patterns for Trading
Keywords: Contract, Party, Portfolio, Filters, Quotes, Scenarios, Trading Patterns in OpenERP
Reading: Chapter 9 from Martin Fowler: [Analysis Patterns: Reusable Object Models](#). Addison Wesley
- 12) Enterprise Application Integration (EAI)
Keywords: IS Design, Blocking vs. Non-Blocking calls, RPC, Middleware, Message Brokers, Principles behind message brokers, Service Coordination Protocol (SCP), EAI and OpenERP
Reading: Chapter 3 and Chapter 7 from Alonso et al.: Web Services
Background chapters: Chapter 1 and Chapter 2 from Alonso et al.: Web Services