# 《软件工程》课程期终考试出题要求

# 一、 题目涵盖知识点范围

- 1. 教材内容: 题目必须**至少**涵盖教材第 1-27 章在课堂中讲授过的全部知识点的 80%:
- 2. 实践内容:必须至少有1题涉及知识点的综合应用能力考查。涉及实践能力考查的题目分数至少占卷面总分的50%。

# 二、题目类型及描述

- 1. 题目必须用拼写、语法严格正确的英文描述;
- 2. 题目必须有明确的评分标准;
- 3. 题目类型原则上不限,通常由选择、判断对错、简答、应用题等组成的混合题型可以较好地考查学生知识面的广度和深度;
- 4. 整卷满分为100分。

# 三、 解题报告

- 1. 考查目的:每题必须写明考查目的,包括考查的知识点、该知识点在整门课程中的重要性、该题目拟考查学生哪方面的能力等;
- 2. 题目详解:给出题目的详细解题过程(即使选择、判断对错,也必须给出详细判断依据); 如果是主观题,还须给出分步骤的评分细则;
- 3. 知识点及难度分布汇总表:给出表格,列出整卷涉及哪些章节的哪些知识点,每个知识点的难度和分数分布。

### 四、 注意事项

- 1. 题目难易分布要适当,应包含一般简单考察基本概念的题目、中等难度的应用或分析型的题目、以及 1 道比较有难度的综合性题目;
- 2. 题目的分数分布要适当,一般简单题占 30%左右、中等题占 20%左右、综合题占 50% 左右:
- 3. 题量要适当,保证绝大部分学生可以在100分钟内完成,留20分钟左右检查;
- 4. 闭卷考试,题目应强调批判性思维,而不是死记硬背;
- 5. 题目要求原创。不得从网络等其他公共资源中直接获取题目,一经查出,该试卷作废。

### 五、 其他说明

- 1. 出卷人资格:平时成绩居教学班前5名的学生有资格以出卷成绩替代期终笔试成绩;
- 2. 出卷成绩满分为 100 分,题目质量和解题报告质量的评价各占 50%;
- 3. 出卷人须在统一笔试开始前将卷子通过 email 发给任课教师,一般将在第 2 天获得该卷的出卷成绩;
- 4. 出卷人可根据成绩自行决定是否参加统一笔试; 若参加笔试, 则以笔试成绩为准;
- 5. 学生一旦选择出卷,即视为承诺对自己所出的题目保密。此为良心承诺。

# Requirements on Composing the Final Exam for Software Engineering

# I. Coverage of the knowledge range

- a) Textbook coverage: the questions must cover at least 80% of all the knowledge points in the chapters 1 27 which have been discussed during the lectures.
- b) Project coverage: at least one practical problem must be designed to test the comprehensive competency of the students. The total points of such a problem must be no less than 50% of the overall points of the exam.

# II. Type and description of the questions

- a) Questions must be described in English with correct grammars and spellings.
- b) Questions must have unambiguous grading criterions.
- c) No strict restrictions on the types of questions. Often, a mixture of multiple choice, true or false, short answer, and project analysis questions will best allow students to demonstrate the breadth and depth of their knowledge.
- d) The full mark of the exam must be 100 points.

# **III.** Solution report

- a) Objectives: each question must have a clear objective which states the knowledge points covered, the importance of the knowledge points, and the competency we expect the students to demonstrate.
- b) Solutions: detailed solutions are expected (even for multiple choice and true or false questions, reasons must be given for each judgment). Partial grading criterions for each step must be specified for subjective questions.
- c) Summary Table: a table summarizing the knowledge points covered and the distribution of the difficulties must be given. The knowledge points and the corresponding chapter numbers must be listed, together with their difficulty levels and the grade weights.

#### IV. Notes

- a) The difficulty levels of the questions must be properly distributed. The exam shall include some simple questions checking the fundamental concepts, questions of medium difficulty about practical problem analyzing and solving, and one comprehensive problem with higher level of difficulty.
- b) The grade weights must be properly distributed. Often the simple questions count about 30%, medium 20%, and comprehensive 50%.
- c) The workload of the exam must be properly given, to guarantee that most of the students will be able to complete in 100 minutes, leaving them 20 minutes to double check.
- d) The exam is close-book. The guestions shall emphasize critical thinking over

- memorization.
- e) All the questions must be original. Fetching materials from public resources such as Internet is forbidden. The exam will be marked invalid if any violation of this rule is found out.

# V. Miscellaneous

- a) Qualification: top 5 students of each class are qualified to compose exams, and to substitute this work for the written final exam.
- b) The full mark of composing an exam is 100 points, with the qualities of the questions and the solution report both counting 50%.
- c) The exam setters must send their exams to the instructors via email before the written final exam begins. Results can often be expected in the next day.
- d) The exam setters can determine whether or not to take the written final exam. If the final exam is taken, then only the exam grade will count.
- e) Once a student decides to compose an exam, it is taken for granted that he/she is responsible for keeping the questions confidential. This is a promise of conscience.