

## Exam-only assessment for Introduction to Databases (INFR10080)

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The *Introduction to Databases* course (INFR10080) is currently assessed for 40% by coursework and for 60% by a written examination. The coursework consists in two assignments in which students are (individually) asked to write queries in SQL<sup>1</sup> and in Relational Algebra that comply with a given specification in a natural language. Due to the high number of students typically enrolled on the course (185 in 2021/2022), the coursework is marked automatically.

This proposal seeks the approval of the board to change the exam/coursework weighting of the course from the current ratio of 60/40 to 100/0, that is, performance will be entirely assessed by means of the written examination. The coursework component will be retained, but it will only be formative and assessed for learning (with feedback).

The motivations behind the proposed change are detailed below.

*Marking skew.* The coursework marks in Introduction to Databases are typically very high, with more than two-thirds of students achieving an A grade. In turn, the final marks for the whole course are skewed toward the top of the scale and misaligned with the Common Marking Scheme. This is a matter of concern for the School, because it undermines the credibility of Informatics degree classifications.

*Plagiarism.* It is an almost impossible task to distinguish coursework submissions that are genuine and original from those that are not. This is especially the case for work that involves code in a language like SQL, because correct solutions will have a very similar structure. Moreover, it is particularly hard to detect plagiarism in small pieces of work.

*Student learning.* Overall, students tend to focus more on marks than on what they should be actually learning. This behaviour is exacerbated by the pressure of too many coursework deadlines. In this respect, summative assignments do not encourage student learning. Furthermore, formative coursework allows for a more flexible structure in which smaller tasks (e.g., writing one or two queries) can be assigned weekly and discussed openly during contact hours, in the best interests of students.

The Learning Outcomes of the course will not be affected by the proposed change. Students' ability to express queries in SQL (as well as in Relational Algebra) remains a central part of the course and will be assessed through specific tasks in the written exam, where all questions are compulsory.

**History and context** A similar proposal, relating to the *Database Systems* course (INFR10070), was put forward and approved at the Board of Studies meeting on 20th February 2019. The 2019-20 edition of that course was then assessed for 100% by written examination, which resulted in a normal distribution of marks centred around 50-55%. Afterwards, at the Board of Studies meeting on 11th December 2019, Database Systems was replaced by Introduction to Databases, which retained the same assessment structure. However, due to the adjustments that became necessary after the COVID-19 pandemic ensued in March 2020, the assessment for Introduction to Databases was reverted to the 75/25 exam/coursework split of pre-2019 Database Systems, and then further revised to 60/40 for the current 2021-22 edition. This, with the complicity of non-proctored examinations in the last two years, has again caused a skew of marks toward the top of the scale.

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<sup>1</sup>The main language for relational database systems.