## Solving the Lectures Scheduling Problem by the Combination of Exchange Procedure and Tabu Search Techniques

D. X. Duong<sup>1</sup> and P. H. Dien<sup>2</sup>

**Abstract:** The lectures scheduling problem of large-scale size is considered very hard and cannot be solved by exact deterministic methods. Usually, heuristic procedures are used to deal with this problem and the one based on the Exchange Procedure proposed by Ferland is of prospect. In the present work we describe another approach based on Tabu Search technique and show that the combination of Tabu Search and Exchange Procedure methods may provide an efficient way for the solution of the problem. Some numerical results are given for showing the advantage of the combination method in comparison with the Tabu Search and Exchange Procedure techniques implemented separately.

Vietnam Commercial University Mai Dich Road, Cau Giay dist., Hanoi

<sup>&</sup>lt;sup>2</sup> Institute of Mathematics Vietnamese Academy of Science and Technology 18 Hoang Quoc Viet Road, Cau Giay District 10307 Hanoi, Vietnam phdien@math.ac.vn