

3C31 Security Coursework 2000-01 Session

The University of Poppleton (UoP) is considering moving to a unified authentication scheme for all its computer users, including staff and students. At present it has a Central Computing Service (CCS) which provides computing services to a number of academic departments and some administrative departments (Finance, Registry, etc.) and provides general student cluster rooms (for computing and library related purposes). There is a Management Information Systems Department which runs a variety of other administrative services with users in academic and administrative departments. Finally, a number of academic departments run their own services for their students and staff (e.g. Computer Science, Physics, Mechanical Engineering, Electronic Engineering, etc.). Each of the groups that run services currently have independent authentication services for their users.

You have been commissioned to write a report on how the present approach affects the working of the university and to identify two approaches that could be used to overcome current weaknesses. Your report should address the following topics:

- a. Security weaknesses in the current arrangement
- b. Issues relating to collaboration and sharing information within the university
- c. Two architectures which might be used to address many of the issues (one using an external authentication agency)
- d. Migration issues in moving to the proposed system and operational issues once it is running
- e. A recommendation (with justification) to the university Vice-Chancellor on whether a move to one of the unified schemes is justified.

Your report should be no longer than 5 pages of A4 in a minimum of 12 point typeface. It should contain an “Executive Summary” at the beginning which states your key observations and recommendations, followed by sections relating to your analysis and deliberations.

PLEASE NOTE THAT THIS IS GRADED COURSEWORK. A STUDENT WHO FAILS TO COMPLETE IT WILL BE AWARDED ZERO MARKS FOR IT.

THIS COURSEWORK SHOULD BE HANDED IN TO THE DEPARTMENTAL OFFICE NO LATER THAN

12noon on Wednesday 10th January 2001.

THERE ARE FIXED PENALTIES FOR HANDING YOUR WORK IN LATE—THEY ARE:

<= 2 WORKING DAYS 10% OF MARK OBTAINED

> 2 WORKING DAYS 100% OF MARK OBTAINED