

DEPARTMENT OF PHYSICS

Bundoora Campus

Unit Code:	PHY32SST
Title of Unit:	<i>Surface Science Techniques</i>
Contact hours:	13, 1-hour lectures (1 per week) 3, 1-hour tutorials
Equivalent US credit:	1 credit
Equivalent US course level:	400 level
Recommended Text:	D.P. Woodruff & T.A. Delchar Modern Techniques of Surface Science Cambridge, 2 nd ed.
Available:	Semester Two

Lecture Content:

1. Introduction
2. Low Energy Electron Diffraction (LEED)
3. X-ray Photoelectron Spectroscopy (XPS) - Introduction
4. XPS Details
5. Auger Spectroscopy
6. Low Energy Ion Scattering (LEIS)
7. Ion Scattering Spectroscopy (ISS)
8. Secondary Ion Mass Spectrometry (SIMS)
9. Applications of SIMS
10. Temperature Programmed Desorption (TPD)
11. Scanning Tunnelling Microscopy (STM)
12. Applications of STM

Assessment:

- | | |
|---|-------|
| • Continuous assessment (<i>tutorials, problem classes</i>) | 12.5% |
| • Examination | 87.5% |

**Further information may be
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