# Appendix C: Teaching Plan Section 2 - example

| Time | Purpose | Lecturer Activity | Student Activity |
|---|---|---|---|
| 9.35 | Introduction to topic<br>First lecture on topic so:<br>• Motivate<br>• Arouse interest<br>• Link to student 'real world' experience | • Tell anecdote that indicates how the principles of heat transfer are relevant to everyone's life as well as all areas of mechanics.<br>• Video clip – fire walkers<br>• Ask students to give other examples where heat transfer is operating in 'hidden' ways. | • Listen<br>• Look at photos on slide<br>• Think about their everyday contact with heat transfer |
| 9.45 | Mini lecture<br>• Examples of heat transfer situations in popular mechanics<br>• Theoretical basis underlying practical situations | • Present examples using powerpoint<br>• Ask them to vote correct/ incorrect on stages<br>• Give them double-glazing example to work through (relatively easy)<br>• Ask for responses and discuss | • Listen and watch<br>• Take notes<br>• Ask questions<br>• Consider each next step in the example<br>• Work through example on heat loss through double-glazed windows and explain answer<br>• Share ideas with other student<br>• Justify responses |
| 10.10 | Problem Solving in Buzz Groups<br>• A problem in heat transfer to be solved | • Directions for buzz group<br>• Tell them what we are doing next, why.<br>• Show them the flash lights signal to stop.<br>• Present problem<br>• Provide 'clues' | • Discuss ideas for solutions with another student<br>• Make notes |
| 10.20 | Summary | • Ask for three different responses<br>• Congratulate on creativity, link engineering and creativity<br>• Provide correct solution<br>• Summarise key points | • Provide responses<br>• Listen<br>• Take notes<br>• Feel positive |
| 10.25 | Close | | |