

**THE THERMAL COMFORT OF STUDENTS IN AIR-CONDITIONED
LECTURE ROOMS**

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ABSTRACT

Thermal comfort is defined as a condition when mind has satisfied with its environment. Nowadays, Malaysia does not have its own range of thermal comfort for the air-conditioned lecture rooms. The range proposed by MS1525:2001 that are currently in use for the air-conditioned lecture rooms is specially proposed for the office and non-residential use. This research measures thermal conditions in air-conditioned lecture rooms, determines the thermal comfort of students in the lecture rooms using the ASHRAE scale and determines the comfort criteria of students (male and females) in air-conditioned lecture rooms. This project involves the measurement of room temperature, relative air humidity and air velocity. A questionnaire was distributed amongst students to determine the students' thermal comfort using the ASHRAE scale. The students' ages, activities and clothings were recorded. Comfort charts was plotted to determine the students' thermal comfort and finally the comfort criteria was produced. The met and clo values of the occupants was determined. A comparison analysis with established comfort criteria was done. This study have suggested the range of comfort condition is 24.9°C - 30.5 °C of temperature and 47.0 % - 48.0 % of relative humidity. For future studies, it is recommended that bigger sample is taken to get more accurate result. The number of male and female sample has to be equal to investigate whether gender has any influence on the comfort conditions.

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