Large class size is one of the problems in the educational sector that developing nations have been grappling with. Ghana as a developing nation is no exception and has its own fair share of this problem at the pre-tertiary and tertiary levels of education. The sight of large class at the tertiary level is appalling and a headache to teachers at that level. The purpose of this study was to provide views of both lecturers and students on large class size and how it affects teaching and learning of the Winneba Campus of UEW (University of Education, Winneba). A cross-sectional sample survey was adopted in this study. Respondents of the study were made up of 42 lecturers and 342 students. The stratified random sampling method was used to select students while the purposive and random sampling techniques were used to select heads of departments and lecturers respectively. The research instruments used in data collection were questionnaire and direct observation. Some of the key findings of the study are that lecturers disagreed with the view that large class size affects the quality of their teaching. They also disagreed with the assertion that large class size makes assessment of students difficult. The students, on the other hand, agreed that large class size does not afford lecturers an opportunity to pay attention to weaker students and do remedial teachings. In line with the findings, the authors recommend that the university should appoint more lecturers to the general courses. Also, the university must make an extra effort to provide more resources and facilities, such as lecture halls and teaching and learning equipment to promote effective teaching and learning. Keywords: large class size, teaching, learning, assessment, lecturers, students