In order to find out the factors affecting students’ academic performance in lesson Mathematical Analysis, a research was carried in both two class of Mathematical Analysis, Class 1 and Class 2, which consists about 250 students in total. And it is noteworthy that about a quarter of students in each class has choose another class after the first semester. Firstly, a survey of ten question covering the aspect of the basic information, attendance, mental statue in class, homework percentage completed and the opinion about the difference of learning effect between two period of classes was given to about 30 students in each class. Then, the grade of three examinations at different learning period are accessed from the teaching assistants. The three examinations are given to the students in both Class 1 and Class 2, each of which was held at the same time. Most of the 240 students of Mathematical Analysis are from Information Institution, ShanghaiTech University while no more ten of them students are from Physics Institution and Life Institution and the 62 trails in the survey are randomly extract from the whole, in which 30 are in Class 1 and 32 are in Class 2.