The reading and the lecture are both about sending humans to Mars. The lecturer challenges the three impossibilities that made by the author. She is of the three reasons that mentioned bellow.

To begin with, the first reason presented by the passage is that the spacecraft is limited, and they cannot provide the food, water, and oxygen they need. This specific argument is challenged by the lecturer. She claims that astronauts can use hydroponics, which is a technique to grow plants in water rather than soli. Furthermore, due to this method, they can regrown plants. Consequently, they recycle wasted-water and also they will have potable water. Additionally, plants can absorb carbon dioxide and release oxygen, so they have fresh water.

Secondly, the author thinks that astronauts' muscle mass will be decreased because of spending a long time in the zero-gravity, and their bone density will be lower. The lecturer, however, rebuts this by mentioning that there are several techniques that had been innovated to make it possible for astronauts to orbiting for many months. She elaborates on this by bringing up the point that they can have regular exercise to prevent decreasing muscle mass, and also, they can use vitamins and minerals like calcium to slow down lowering bone density.

Finally, the author posits the theory that can be hurt because of the dangerous levels of space radiation, significantly the sun's radiation. In addition, it is impossible for them to bring a shield because it would add too much weight to the spacecraft. In contrast, the lecturer's position is that there are periods of time that these radiations are active. Astronauts can do their regular works in a normal unshielded cloth most of the time, and when their instruments detect the radiation is increasing, they can stay in a small shielded area until the danger has passed.

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