

生學年度	101	招生類別	碩士班
所班別	自然資源與環境學系碩士班(地球科學組)		
目	專業英文		
意事項	滿分為 50 分		

1. 英翻中 (50%- 25 分)

THE 135th, and final, space-shuttle mission took off successfully from the Kennedy Space Centre at Cape Canaveral, Florida, on July 8th. Atlantis will resupply the International Space Station and deliver an experiment intended to help develop a refuelling system for telecommunications satellites that might otherwise drift out of their assigned orbits. If all goes well, the craft will return to Earth on July 20th. It will then become a museum piece, on display at the space centre.

The end of the shuttle programme, which leaves America without the ability to launch people into orbit for the first time since 1962, has been the subject of much controversy between those who think manned space flight a waste of money and those who see space as the country's manifest destiny and the final frontier of human exploration. Alternative systems for launching humans, employing single-shot rockets, are under development by several American companies. In the meantime, American astronauts bound for the space station will have to hitch a lift with the Russians.

2. 中翻英 (50%- 25 分)

地球磁場對於生命非常重要。要是沒有磁場，其後果不只是羅盤無法運作，而是來自太空的高能量粒子（主要是來自太陽的質子）長驅直達地面，造成生物死亡。當熔岩從火山噴出，會因為冷卻而凝固成為玄武岩。這種岩石略帶磁性，所以當它固化時，便帶有當時地球磁場的訊息。藉由測量從火山噴發出來的玄武岩磁性，科學家發現地球磁場的確有逆轉現象，週期大約數萬年到數百萬年，平均20萬到30萬年。