# ASEN 6020
# Project Proposal
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Problem statement - Find an optimal trajectory for a low-thrusting nano-satellite (cubesat) starting from a rideshare LEO to lunar transfer orbit. Rideshare orbits are usually sun-synchronous around 550 km. It can be assumed that the right ascension is already optimal. Thruster characteristics might vary but initial properties can be as follows:

- Thrust - 100 mNm
- Specific Impulse - 1000 s

Propellant mass can be assumed to be enough to meet the optimal control and spacecraft mass is slightly greater than propellant mass (+10 kg).

Backup - Optimize plane change maneuvers for a low-thrusting small satellite in a rideshare low earth orbit.