

HW: MCNFP

State University has three professors who each teach four courses per year. Each year, four sections of marketing, finance, and production must be offered. At least one section of each class must be offered during each semester (fall and spring). Each professor's time preference and preference for teaching various courses are given below. The total satisfaction a professor earns teaching a class is the sum of the semester satisfaction and the course satisfaction. For example, professor 1 derives a satisfaction of $3+6=9$ from teaching marketing during the fall semester.

	Professor 1	Professor 2	Professor 3
Fall Preference	3	5	4
Spring Preference	4	3	4
Marketing	6	4	5
Finance	5	6	4
Production	4	5	6

Formulate an MCNFP that can be used to assign professors to courses so as to maximize the total satisfaction of the three professors and solve the model.