Problem 3c

I ran run_p3.py on 'profile.txt'

Final output:
Here's the best schedule:

Quarter	Units	Course
Win2016	4	CS228
Win2016	3	CS223A
Win2016	3	CS140
Spr2016	3	CS155
Spr2016	3	CS225A
Spr2016	4	CS161
Aut2016	4	CS145
Aut2016	3	CS144
Aut2016	3	CS229

Analysis:
Yup. That's exactly what I decided to take. Cool stuff! ☺

Program output:

Units: 0-10
Quarter: ['Win2016', 'Spr2016', 'Aut2016']
Taken: set(['CS221', 'CS103', 'STATS116', 'CS110', 'CS107', 'CS106B', 'CME104', 'CME106', 'CS109', 'CME100', 'CME102'])
Requests:
Request{['CS145'] [] [] 4.0}
Request{['CS228'] [] [] 4.0}
Request{['CS223A'] [] [] 4.0}
Request{['CS144'] [] [] 6.0}
Request{['CS140'] [] [] 2.0}
Request{['CS155'] [] ['CS140'] 6.0}
Request{['CS225A'] [] ['CS223A'] 3.0}
Request{['CS161'] ['Spr2016', 'Aut2016'] [] 10.0}
Request{['CS229'] ['Aut2016'] [] 6.0}
Request{['CS246'] [] ['CS145'] 10.0}
Found 24 optimal assignments with weight 829440.000000 in 568611 operations
First assignment took 112 operations
829440.0
('CS161', 'Spr2016') = 4
(Request{['CS246'] [] ['CS145'] 10.0}, 'Spr2016') = None
('CS145', 'Win2016') = 0

(Request{['CS228'] [] [] 4.0}, 'Aut2016') = None
('CS161', 'Win2016') = 0
(Request{['CS161'] ['Spr2016', 'Aut2016'] [] 10.0}, 'Spr2016') = CS161
('CS223A', 'Win2016') = 3
('sum', 'Win2016_units', 1) = (0, 4)
(Request{['CS145'] [] [] 4.0}, 'Win2016') = None
('CS161', 'Aut2016') = 0
('sum', 'Win2016_units', 3) = (7, 7)
('sum', 'Spr2016_units', 10) = 10
('sum', 'Aut2016_units', 4) = (7, 7)
('sum', 'Win2016_units', 5) = (10, 10)
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Spr2016'), 'CS145'), 'aggregated') = False
('CS246', 'Spr2016') = 0
('sum', 'Aut2016_units', 6) = (7, 7)
('sum', 'Win2016_units', 7) = (10, 10)
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Win2016'), 'CS140'), 'aggregated') = False
('sum', 'Aut2016_units', 0) = (0, 4)
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Aut2016'), 'CS145'), 1) = no
('sum', 'Win2016_units', 9) = (10, 10)
('CS223A', 'Spr2016') = 0
('CS140', 'Win2016') = 3
('sum', 'Aut2016_units', 2) = (4, 4)
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Aut2016'), 'CS140'), 'aggregated') = True
('CS155', 'Aut2016') = 0
('CS144', 'Spr2016') = 0
(Request{['CS155'] [] ['CS140'] 6.0}, 'Win2016') = None
('sum', 'Spr2016_units', 8) = (10, 10)
(Request{['CS246'] [] ['CS145'] 10.0}, 'Win2016') = None
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Win2016'), 'CS223A'), 'aggregated') = False
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Aut2016'), 'CS140'), 1) = prev
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Aut2016'), 'CS145'), 'aggregated') = False
('sum', 'Aut2016_units', 8) = (7, 10)
('CS140', 'Spr2016') = 0
(Request{['CS140'] [] [] 2.0}, 'Aut2016') = None
('sum', 'Spr2016_units', 4) = (0, 0)
(Request{['CS161'] ['Spr2016', 'Aut2016'] [] 10.0}, 'Aut2016') = None
('CS228', 'Aut2016') = 0
('sum', 'Spr2016_units', 6) = (3, 6)
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Spr2016'), 'CS140'), 0) = equals
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Spr2016'), 'CS223A'), 0) = equals
(Request{['CS144'] [] [] 6.0}, 'Win2016') = None
('sum', 'Spr2016_units', 0) = (0, 0)

('CS246', 'Aut2016') = 0
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Aut2016'), 'CS223A'), 1) = prev
('CS144', 'Aut2016') = 3
('sum', 'Spr2016_units', 2) = (0, 0)
(Request{['CS145'] [] [] 4.0}, 'Spr2016') = None
(Request{['CS225A'] [] ['CS223A'] 3.0}, 'Win2016') = None
('CS145', 'Spr2016') = 0
(Request{['CS140'] [] [] 2.0}, 'Win2016') = CS140
('CS223A', 'Aut2016') = 0
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Aut2016'), 'CS145'), 0) = no
(Request{['CS228'] [] [] 4.0}, 'Spr2016') = None
('sum', 'Aut2016_units', 10) = 10
('CS228', 'Spr2016') = 0
(Request{['CS225A'] [] ['CS223A'] 3.0}, 'Spr2016') = CS225A
(Request{['CS155'] [] ['CS140'] 6.0}, 'Spr2016') = CS155
('CS144', 'Win2016') = 0
(Request{['CS223A'] [] [] 4.0}, 'Aut2016') = None
('CS225A', 'Win2016') = 0
(Request{['CS144'] [] [] 6.0}, 'Spr2016') = None
(Request{['CS161'] ['Spr2016', 'Aut2016'] [] 10.0}, 'Win2016') = None
(Request{['CS140'] [] [] 2.0}, 'Spr2016') = None
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Spr2016'), 'CS140'), 'aggregated') = True
(Request{['CS223A'] [] [] 4.0}, 'Win2016') = CS223A
('sum', 'Win2016_units', 0) = (0, 0)
('sum', 'Aut2016_units', 5) = (7, 7)
('sum', 'Win2016_units', 2) = (4, 7)
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Spr2016'), 'CS223A'), 'aggregated') =
True
('sum', 'Aut2016_units', 7) = (7, 7)
('sum', 'Win2016_units', 4) = (7, 10)
(Request{['CS145'] [] [] 4.0}, 'Aut2016') = CS145
('sum', 'Aut2016_units', 1) = (4, 4)
('sum', 'Win2016_units', 6) = (10, 10)
('CS246', 'Win2016') = 0
(Request{['CS229'] ['Aut2016'] [] 6.0}, 'Spr2016') = None
('sum', 'Aut2016_units', 3) = (4, 7)
('CS229', 'Win2016') = 0
('sum', 'Win2016_units', 8) = (10, 10)
('CS155', 'Win2016') = 0
('sum', 'Win2016_units', 10) = 10
('CS140', 'Aut2016') = 0
(Request{['CS144'] [] [] 6.0}, 'Aut2016') = CS144
(Request{['CS223A'] [] [] 4.0}, 'Spr2016') = None
('CS228', 'Win2016') = 4
('or', ((Request{['CS155'] [] ['CS140'] 6.0}, 'Aut2016'), 'CS140'), 0) = equals
('sum', 'Spr2016_units', 9) = (10, 10)

('sum', 'Aut2016_units', 9) = (10, 10)
('CS155', 'Spr2016') = 3
('CS229', 'Spr2016') = 0
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Win2016'), 'CS145'), 'aggregated') = False
(Request{['CS229'] ['Aut2016'] [] 6.0}, 'Win2016') = None
('CS229', 'Aut2016') = 3
('sum', 'Spr2016_units', 5) = (0, 3)
(Request{['CS246'] [] ['CS145'] 10.0}, 'Aut2016') = None
(Request{['CS225A'] [] ['CS223A'] 3.0}, 'Aut2016') = None
('sum', 'Spr2016_units', 7) = (6, 10)
(Request{['CS155'] [] ['CS140'] 6.0}, 'Aut2016') = None
(Request{['CS228'] [] [] 4.0}, 'Win2016') = CS228
('sum', 'Spr2016_units', 1) = (0, 0)
('CS225A', 'Spr2016') = 3
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Aut2016'), 'CS223A'), 0) = equals
('CS225A', 'Aut2016') = 0
('CS145', 'Aut2016') = 4
('sum', 'Spr2016_units', 3) = (0, 0)
('or', ((Request{['CS225A'] [] ['CS223A'] 3.0}, 'Aut2016'), 'CS223A'), 'aggregated') = True
(Request{['CS229'] ['Aut2016'] [] 6.0}, 'Aut2016') = CS229
('or', ((Request{['CS246'] [] ['CS145'] 10.0}, 'Spr2016'), 'CS145'), 0) = no
Here's the best schedule:

Quarter	Units	Course
Win2016	4	CS228
Win2016	3	CS223A
Win2016	3	CS140
Spr2016	3	CS155
Spr2016	3	CS225A
Spr2016	4	CS161
Aut2016	4	CS145
Aut2016	3	CS144
Aut2016	3	CS229