

High-Precision Seminar Assignment Optimization

Results (Intermediate Report - Iteration 5000)

Pattern ID: 108 | Total Score: 564.00

Total Students: 112
Number of Patterns Evaluated: 10000
Number of Parallel Processes: 8

Student Satisfaction Statistics:

1st Preference Achieved: 6.2%
2nd Preference Achieved: 4.5%
3rd Preference Achieved: 6.2%
Not Preferred: 83.0%

Seminar	Target	Actual	Total Score	Avg. Satisfaction	1st Pref. Count	Details
A (1.5x)	10	11	82.5	7.50	1	S105(7.5), S1(7.5), S80(7.5), S76(7.5), S50(7.5)... (6 others)
B	10	11	55.0	5.00	0	S59(5.0), S41(5.0), S53(5.0), S57(5.0), S27(5.0)... (6 others)
C	5	7	32.0	4.57	0	S91(5.0), S99(5.0), S65(5.0), S16(5.0), S68(5.0)... (2 others)
D (1.8x)	10	11	93.6	8.51	1	S10(9.0), S93(9.0), S34(9.0), S102(3.6), S48(9.0)... (6 others)
E	7	9	39.0	4.33	0	S23(5.0), S73(5.0), S39(2.0), S20(5.0), S77(2.0)... (4 others)
F	5	6	24.0	4.00	0	S104(5.0), S78(5.0), S112(5.0), S11(2.0), S61(5.0)... (1 others)
G	5	5	19.0	3.80	0	S46(5.0), S6(5.0), S54(5.0), S67(2.0), S29(2.0)
H	5	2	10.0	5.00	0	S72(5.0), S52(5.0)
I	10	10	42.0	4.20	1	S89(5.0), S42(5.0), S18(5.0), S51(5.0), S94(5.0)... (5 others)
J	5	5	19.0	3.80	0	S36(5.0), S12(5.0), S26(5.0), S19(2.0), S17(2.0)
K	5	5	22.0	4.40	0	S111(5.0), S24(5.0), S32(5.0), S55(5.0), S75(2.0)
L	5	3	15.0	5.00	0	S64(5.0), S110(5.0), S13(5.0)
M (0.7x)	5	2	4.9	2.45	0	S63(3.5), S103(1.4)
N	5	5	16.0	3.20	0	S96(5.0), S98(5.0), S14(2.0), S30(2.0), S7(2.0)
O (0.5x)	5	3	6.0	2.00	0	S100(2.5), S56(2.5), S109(1.0)
P	5	6	18.0	3.00	0	S58(5.0), S95(5.0), S44(2.0), S37(2.0), S92(2.0)... (1 others)
Q (1.2x)	10	11	66.0	6.00	4	S33(6.0), S2(6.0), S60(6.0), S15(6.0), S82(6.0)... (6 others)

Algorithms Used:

- 1. Realistic Preference Distribution Generation

2. ****Greedy Initial Assignment****
3. Local Search Improvement (2-opt & Single Move + Simplified Simulated Annealing)
4. Speedup through Parallel Processing