Of the following Tufts institutions, please indicate in which you would like to see Tufts increase investment. Please rank your preferences (1 being your most preferred choice and 5 being your least preferred choice). Please give each candidate a ranking and do not mark any ties.

1. Tisch Library (Condorcet winner: wins contests with all other choices)
2. Steve Tisch Sports and Fitness Center loses to Tisch Library by 13–8
3. Tufts Dining Services (ie Dewick-MacPhee, Hodgdon, etc) loses to Tisch Library by 11–10, loses to Steve Tisch Sports and Fitness Center by 12–9
4. Tufts Office of Public Safety (ie TEMS, Shuttle Services, etc) loses to Tisch Library by 12–10, loses to Tufts Dining Services (ie Dewick-MacPhee, Hodgdon, etc) by 12–10
5. Tufts Cultural Houses loses to Tisch Library by 19–3, loses to Tufts Office of Public Safety (ie TEMS, Shuttle Services, etc) by 17–5

5) Bpath: DAB (11:0)
   - DA (3:0)
   - DAD (6:0)

w = εA3

Elimination
each

6) Run-off
   - Eliminate all but A, D
   - A beats D (13:8)

w = εA3

7A One-Shot

Plurality - D > A > C > B = E

Elimination - A > D > C > E > B

Pairwise - A > D > C > E > B
7B) Recursive

Plurality: D > A > C > E > B
Rd 1: drop D > A with 14
Rd 2: drop C with 13
Rd 3: drop E with 16

Elimination: A > D > C > E > B
Rd 1: eliminate B > E - drop A with 8
Rd 2: eliminate D > E - drop C with 12
Rd 3: eliminate B > drop C with 12
Rd 4: drop E with 16

Pairwise:

A > B > C > E > D

8A) Condorcet: A - beats everyone head to head

Majority = none - A & D have most votes at 7 each
but neither meet majority threshold of 11

9) Ballot types

19 ballot types
Extra Credit Vote Gradesheet

Name: Investment

Setup of poll (30): substantive question (10) $\checkmark$
- $n \geq 5$ (10) $\checkmark$
- $N \geq 20$ (10) $\checkmark$

Presentation (40): 1 sheet of paper, no glue, no tape, no staples (10) $\checkmark$
detailed ballots from website (10) $\checkmark$
1-1 comparison results from website (5) 0
beatpaths results from website (5) 0
few ties, and they are marked (5) $\checkmark$
organized and legible, question and key (5) $\checkmark$

Analysis (80): preference schedule and 1-1 comparisons (12) $\checkmark$
statement of number of ballot types (2) $\checkmark$
graph with margins (12) $\checkmark$
Smith set (4) 0
statement about Majority candidate (2) $\checkmark$
statement about Condorcet candidate (2) $\checkmark$
credit for no Condorcet candidate? (10) 0
beatpath winner(s) (8) 0
runoff winner(s) (4) $\checkmark$
plurality winner(s) (5) $\checkmark$
elimination winner(s) (8) $\checkmark$
pairwise winner(s) (8) $\checkmark$
check on pairwise points (3) 0

Grade (of 150 possible points): 119/150