

Advanced STEM Students

Nguyễn Quân Bá Hồng*

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Tóm tắt nội dung

This text is a part of the series *Some Topics in Advanced STEM & Beyond*:

URL: https://nqbh.github.io/advanced_STEM/.

Latest version:

- *Advanced STEM Students*.

PDF: URL: https://github.com/NQBH/advanced_STEM_beyond/blob/main/teach/student/NQBH_student.pdf.

T_EX: URL: https://github.com/NQBH/advanced_STEM_beyond/blob/main/teach/student/NQBH_student.tex.

- .

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1 UMT Summer Semester 2025/1480: Introduction to Mathematical Analysis

1. TRẦN THANH CƯỜNG.

- Absence: -2 - 2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus:

2. HUỖNH LÂM VŨ ĐÌNH.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 1 + 0.5 + 0.5 + 0.5$.
- Bonus: $1 + 2$.

3. TRƯƠNG CÔNG HOAN.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $1 + 2 + 1.5$.

4. NGUYỄN HUY HOÀNG [NHH].

*A scientist- & creative artist wannabe, a mathematics & computer science lecturer of Department of Artificial Intelligence & Data Science (AIDS), School of Technology (SOT), UMT Trường Đại học Quản lý & Công nghệ TP.HCM, Hồ Chí Minh City, Việt Nam.
E-mail: nguyenquanbahong@gmail.com & hong.nguyenquanba@umt.edu.vn. Website: <https://nqbh.github.io/>. GitHub: <https://github.com/NQBH>.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $0.25 + 0.5 + 0.5 + 1 + 2$ (count rooms) $+ 2$ (build roads) $+ 2$ (labyrinth) $+ 2$ (message route) $+ 2$ (Christmas party) $+ 0.5 + 1$ (l'Hospital) $+ 1$ (next prime) $+ 0.25$ (weird alg) $+ 0.25$ (repetition) $+ 0.25$ (miss number) $+ 0.25$ (increase array) $+ 0.5$ (permutation) $+ 0.5$ (2 sets) $+ 0.5$ (Hanoi tower) $+ 0.5$ (bee) $+ 0.5$ (gold coin) $+ 0.5$ (number spiral) $+ 0.25$ (2 knights) $+ 0.5$ (bit string) $+ 0.5$ (trailing 0) $+ 0.5$ (coin pile) $+ 0.25$ ($3n + 1$) $+ 0.5 + 0.25 + 0.25 + 0.5$ (create string) $+ 1 + 1 + 1$.

5. LỮ MINH HOÀNG.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus:

6. HÀ QUANG HUY.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus:

7. NGUYỄN BẢO KHÁNH [NBK].

- Absence: -1.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $1 + 2 + 1 + 0.5 + 1 + 1.5$ (l'Hospital) $+ 0.5 + 0.5 + 0.5 + 1 + 1$.

8. NGUYỄN LÊ DĂNG KHOA [NLDK].

- Absence: -2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$ (gift) $+ 1.5 + 0.25 + 0.5$ (doubles) $+ 0.5$ (prime) $+ 0.5$ (houseboat) $+ 1$ (red black) $+ 1$ (count rooms) $+ 1$ (dice) $+ 1$ (min coin) $+ 1$ (coin combination I) $+ 1$ (coin combination II) $+ 1$ (grid path I) $+ 1.5$ (book shop) $+ 1$ (exp I) $+ 1$ (exp II) $+ 0.5$ (count divisor) $+ 1$ (common divisor) $+ 1.5$ (Josephus queries) $+ 2$ (sum divisor) $+ 0.75$ (next prime) $+ 1$ (binom coeff) $+ 1$ (create string II) $+ 1$ (distribute apple) $+ 1$ (Christmas party) $+ 1.75$ (l'Hospital) $+ 0.25$ (weird alg) $+ 3$ (permutation order) $+ 1.5$ (meet middle) $+ 0.25$ (repetition) $+ 0.25$ (increase array) $+ 0.25$ (permutation) $+ 0.25$ (number spiral) $+ 0.25$ (2 sets) $+ 0.25$ (bit string) $+ 0.25$ (trailing zeros) $+ 0.25$ (palindrome reorder) $+ 0.25$ (coin pile) $+ 0.25$ (hangover) $+ \text{sum } (0.25) + 0.25$ (humidex) $+ 0.25$ (specialized 4-digit num) $+ 0.25$ (quicksum) $+ 0.25$ (Dirichlet) $+ 0.5 + 1$ (circumference circle) $+ 1$ (filled subgrid count I) $+ 0.5 + 1 + 0.5$ (naughty cow) $+ 0.5$ (chicken fox) $+ 0.5$ (farm guard) $+ 0.5$ (wolf sheep) $+ 1$ (labyrinth) $+ 1$ (ocean).

9. PHAN GIA LẠC [PGL].

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $0.5 + 0.25 + 0.25 + 0.5$ (doubles) $+ 0.5$ (houseboat) $+ 0.5$ (prime) $+ 1$ (count room) $+ 1$ (min coin) $+ 0.5$ (count divisor) $+ 0.75$ (next prime) $+ 1$ (prime multiple) $+ 1$ (binom coeff) $+ 1$ (create string II) $+ 1$ (distribute apple) $+ 1$ (Christmas party) $+ 0.25$ (bitstring) $+ 0.25$ (gray code) $+ 2 + 0.5 + 1 + 2$ (Riemann sums).

10. PHAN PHƯƠNG PHI [PPP].

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $1 + 0.5 + 1 + 0.5 + 0.5$ (prime) $+ 1$ (count rooms) $+ 1$ (dice) $+ 1$ (coin) $+ 1$ (coin combination I) $+ 0.5$ (count divisor) $+ 1$ (common divisor) $+ 1$ (distribute apple) $+ 0.75$ (l'Hospital) $+ 1 + 1$ (count bit) $+ 0.5$ (2 knights) $+ 0.5 + 0.5 + 1$ (filled subgrid count I) $+ 0.5 + 0.5 + 0.5$.

11. DẶNG MINH PHƯƠNG.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Absence: -2.
- Bonus:

12. NGUYỄN HOÀNG QUÂN.

- Absence: -1.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: 1.

13. ĐƯỜNG NGUYỄN MINH SƠN.

- Absence: -2.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: 1.
14. HẦU TRUNG THÀNH.
- Absence: -2 - 2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
15. TẠ MINH THIÊN.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1 + 1 + 1$.
16. LÊ NGUYỄN QUỐC TOÀN.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2 + 2 + 2$.
17. NGUYỄN HOÀNG NGỌC TRÂN.
- Absence: -2 - 2 - 2 - 2 - 2 - 2 - 2 - 2.
 - Bonus:
18. NGUYỄN ANH TUYỂN.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: 1.
19. NGUYỄN NHƯ Ý.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1 + 1$.

1.1 Potential topics for midterm exam

1. Cho dãy số $\{u_n\}_{n=1}^{\infty}$. Cho vài giá trị cụ thể của ε , tính N_ε .

2 UMT Summer Semester 2025/1481: Introduction to Mathematical Analysis

1. LÊ MINH TRÂM ANH.
- Absence: -2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $3.5 + 3.5 + 1.5 + 1$.
2. NGUYỄN BẢO ANH.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Late: 5 mins.
 - Bonus: 1.5.
3. CAO GIA BẢO.
- Absence: -2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
4. VŨ VĂN ĐẠT.
- Absence: -2 - 1.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $1 + 0.5 + 1$.
5. TRẦN VĂN HẬU.
- Absence: -2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

- Bonus: $1 + 2.5 + 1 + 1.5$.
6. NGUYỄN NGỌC BÍCH HIỀN [NNBH].
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $0.25 + 1 + 1 + 2 + 1 + 1.5 + 1.5$ (int poly) $+ 1.5$ (int poly like).
7. NGUYỄN VĂN HIẾU.
- Absence: -2 - 2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
8. DƯƠNG XUÂN HƯNG [DXH].
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $1 + 1 + 1$ (gift) $+ 1$ (picture) $+ 2$ (count rooms) $+ 2.5$ (coin combination I) $+ 2$ (coin combination II) $+ 3$ (array description) $+ 1.5$ (numerical differentiation OOP) $+ 2$ (next prime) $+ 0.5$ (weird alg) $+ 1.5$ (int poly) $+ 1$ (miss num) $+ 0.5$ (repetition) $+ 0.5$ (increase array) $+ 0.5$ (hangover) $+ 3$ (IMO2007P3) $+ 0.5$ (ugly num) $+ 1$ (max xor sum) $+ 0.5$ (Pascal triangle).
9. TRẦN LÊ GIA HUY.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Late: 20 + 21 mins.
10. TRẦN QUANG HUY.
- Absence: -2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $1 + 2 + 1.5$.
 - Late: 22 mins.
11. ĐẶNG PHÚC AN KHANG [DPAK].
- Absence: -2 - 2 - 2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75$.
 - Late: 15 + 52 + 80 mins.
 - Bonus: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 1 + 0.5$ (virus) $+ 0.5$ (gift) $+ 0.5$ (game) $+ 0.25$ (financial management) $+ 0.5 + 0.5$ (prime) $+ 1$ (red black) $+ 1 + 1$ (x^a) $+ 1$ (count room) $+ 1$ (build road) $+ 1$ (dice combination) $+ 1$ (minimizing coin) $+ 1$ (coin combination I) $+ 1$ (coin combination II) $+ 1.5$ (remove digit) $+ 1$ (grid path I) $+ 1$ (book shop) $+ 1$ (exp I) $+ 1.5$ (edit distance) $+ 1.5$ (longest common subsequence) $+ 1$ (num diff polynomial) $+ 1.5$ (prime multiple) $+ 0.75$ (next prime) $+ 1$ (binom coeff) $+ 1.5$ (meet middle) $+ 1.5$ (Hamming dist) $+ 0.25$ (palindrome reorder) $+ 0.75$ (2 set) $+ 0.25$ (bit string) $+ 0.25$ (num spiral) $+ 0.25$ (trailing 0) $+ 0.25$ (tower Hanoi) $+ 0.5$ (apple division) $+ 0.25$ (create string) $+ 0.25$ (IMO2007P5) $+ 0.25$ (IMO2008P3) $+ 0.25$ (hangover) $+ 0.25$ (sum) $+ 0.1$ (humidex) $+ 0.25$ (quicksum) $+ 0.25$ (specialized 4-digit num) $+ 0.25$ (contesting decision) $+ 0.25$ (Dirichlet) $+ 0.25$ (circumference circle) $+ 0.25$ (vertical histogram) $+ 1.5$ (IMO2007P1) $+ 0.25$ (gold coin) $+ 0.25$ (bee) $+ 0.25$ (manager) $+ 0.25$ (Pascal lib) $+ 0.25$ (ride school) $+ 0.25$ (self num) $+ 0.25$ (speed limit) $+ 0.25$ ($3n + 1$ prob) $+ 0.25$ (calendar) $+ 0.5$ (sym order) $+ 0.25 + 0.75$ (knapsack) $+ 0.5$ (tile) $+ 0.25$ (Hanoi tower) $+ 0.25$ (mex grid construction) $+ 0.25$ (knight move grid) $+ 0.5 + 1 + 0.25 + 2$ (Stirling 1) $+ 2$ (falling factorial) $+ 2$ (rising factorial) $+ 0.5$ (Pascal triangle) $+ 0.5$ (naughty cow) $+ 0.5$ (pond) $+ 1$ (ocean) $+ 0.5$ (chicken fox) $+ 0.5$ (farm guard).
12. LƯƠNG QUỐC KHÁNH.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $1 + 1 + 1 + 1 + 0.5$.
13. NGUYỄN HÀ ĐĂNG KHOA.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
 - Bonus: $1 + 0.5 + 2.5$.
14. NGUYỄN HUY ĐĂNG KHOA.
- Absence: -1 - 2.
 - Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

15. HUỖNH ĐỖ ĐĂNG KHOA.

- Late: $23 + 45 + 25 + 20 + 10 + 25 + 22$ mins.
- Early attendance: $0.75 + 0.75$.
- Bonus: 1.

16. TRẦN TRUNG KIÊN.

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

17. NGUYỄN HUỖNH CHÍ LÂM.

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $1 + 0.75 + 1 + 1$.

18. LÊ HOÀNG LINH.

- Absence: -2.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $1 + 1 + 1.5 + 1 + 2 + 2.5 + 1.5$.
- Late: 30 mins.

19. LÂM BẢO NGỌC.

- Absence: -1.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $0.25 + 1 + 4 + 1 + 1 + 3$.
- Late: 10 mins.

20. NGUYỄN LƯƠNG NGHĨA [NLN].

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $0.5 + 1 + 1 + 3 + 1.5 + 1.5 + 1.5 + 1 + 1 + 1.5$ (int) + 2.5.

21. TRẦN PHÚC NGUYỄN.

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

22. BÙI VĂN NHỎ.

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Late: $40 + 10$ mins.
- Bonus: $1 + 1 + 1 + 1 + 3 + 0.75 + 2$.

23. LÊ THANH TÂN.

- Absence: -1 - 1 - 2.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Late: 5 mins.

24. HUỖNH THỊ KIỀU THU.

- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $1 + 1 + 1 + 1.5 + 1.5 + 1 + 2$.

25. HOÀNG NGHĨA TÍN.

- Absence: -2.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

26. HOÀNG ANH TUẤN.

- Absence: -2 - 2 - 2.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.

27. NGÔ THANH TÙNG.

- Absence: $-2 - 2 - 2 - 2$.
- Early attendance: $0.75 + 0.75 + 0.75$.
- Late: $29 + 15$ mins.

28. NGÔ HOÀNG TÙNG [NHT].

- Absence: -2 .
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 1.5 + 0.5 + 0.5$ (virus) + 0.5 (vni) + 0.5 (gift) + 0.5 (game) + $1 + 1$ (count rooms) + 1 (labyrinth) + 1 (build roads) + 1 (dice) + 1 (min coin) + 1 (coin combination I) + 1 (coin combination II) + 1 (remove digit) + 1 (grid path) + 1.5 (array description) + 1 (book shop) + 1.5 (count towers) + 1.5 (edit distance) + 1 (exp I) + 1 (exp I) + 1 (num diff poly) + 1.25 (num diff poly 1) + 1.5 (Josephus queries) + 2 (sum divisor) + 0.75 (next prime) + 0.75 (next prime) + 1 (binom coeff) + 1 (create string II) + 1 (distribute apple) + 1 (Christmas party) + 3 (permutation order) + 1.5 (Hamming dist) + 0.75 (int poly C++) + 0.25 (palindrome reorder) + 0.25 (2 sets) + 0.25 (create string) + 0.5 (midterm) + 0.15 (humidex) + 0.25 (hangover) + 0.25 (specialized 4 digit num) + 0.25 (quick sum) + 0.25 (contesting decision) + 0.25 (vertical histogram) + 0.25 (ride school) + 0.75 (ugly number) + 0.25 (bee) + 0.25 (gray code) + 1 (filled subgrid count II).

29. TRẦN MỘNG TUYỀN.

- Absence: $-1 - 1$.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $1.5 + 2 + 2.5$.

30. NGUYỄN QUANG VỸ.

- Absence: $-1 - 2 - 1$.
- Early attendance: $0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75$.
- Bonus: $1.5 + 4 + 1 + 1.5 + 1.5 + 1 + 1.5 + 1.5 + 2.5$.

3 UMT Summer Semester 2025/1387: Combinatorics & Graph Theory

1. VÕ NGỌC TRÂM ANH [VNTA].

- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $0.75 + 1 + 2 + 1.5 + 0.5 + 0.5 + 0.5$ (Fibonacci + Lucas) + 0.5 (virus) + 2.5 (gen func) + 2 (Euler candy gen func) + 0.5 (houseboat) + 0.5 (prime) + 1 (red black) + 1 (count rooms) + 1 (labyrinth) + 1 (build roads) + 1 (message routes) + 1 (build team) + 1 (round trip) + 1 (monster) + 1.5 (flight route) + 1 (dice) + 1 (coin) + 1 (coin combination I) + 1 (coin combination II) + 1 (grid path) + 2 (Dijkstra) + 3 (proof Dijkstra) + 2.5 (Dijkstra priority queue) + 1 (exp I) + 1 (exp II) + 1 (Stirling 2 DP) + $0.5 + 0.75 + 1$ (valid parentheses) + 1 (C++ valid parentheses) + 1 (PAC Catalan C++) + 1 (Pascal triangle, multinomial) + 0.5 (count geo domain) + 1.5 (Josephus queries) + 1.5 (Bell matrix multiplication) + $0.5 + 0.5 + 1$ (count coprime pair) + 1 (binom coeff) + 1 (create string II) + 1 (distribute apple) + 1 (Christmas party) + 0.75 (spanning tree) + 0.75 (tiling) + 0.25 (weird alg) + 0.25 (repetition) + 0.25 (miss number) + 0.25 (increase array) + 0.25 (permutation) + 1 (line segment intersection) + 1.5 (graph representation converters) + 0.25 (derangement) + 0.25 (coffee) + 2 (score tool) + 1 (count 1) + 0.5 (knapsack) + 1 (int partition) + 0.5 (p 5n + 4) + 0.75 (Newton binomial) + 0.25 (partition) + 0.5 (subset square num) + 2 (Stirling II) + 1 (falling factorial) + 1 (rising factorial) + 0.5 (Pascal triangle) + 0.5 (Tribonacci) + 1 (Ferrers diagram) + 2 (proof leaf of tree).
- Midterm: 11.25 .

2. HOÀNG ANH [HA].

- Early attendance: $0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $1.5 + 1 + 0.5 + 1.5 + 1$ (Stirling 2) + $0.25 + 0.25 + 0.5$ (Euler) + 0.25 (monic monomial) + $0.5 + 0.25 + 1$ (types of graph) + $0.5 + 1$ (recursion sum of powers) + $0.5 + 0.25 + 0.25 + 0.75$ (graphic) + $0.5 + 0.25 + 0.25 + 0.75 + 0.5 + 0.75$. Done.
- Midterm: 6.5 .

3. VÕ HUỖNH THÁI BẢO.

- Early attendance: $0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.

- Late: 7 mins.
- Bonus: $0.5 + 0.5 + 0.75 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 1 + 0.5 + 0.5 + 0.5 + 0.5$ (Stirling 2) + $0.5 + 0.5 + 1.5$ (gen func) + 0.5 (Euler candy) + $0.5 + 0.5 + 0.5 + 0.25$ (Dirichlet principle) + 1 (derangement) + $1 + 1 + 1$ (Pascal triangle) + $0.25 + 0.25 + 0.25 + 0.5 + 0.5 + 0.25 + 0.5 + 0.5 + 0.25 + 1$ (Petersen) + $0.5 + 0.5 + 0.5$ (forest) + $1 + 1 + 1 + 1 + 1 + 1 + 0.5$
To 6.216 p. 16+++
- Midterm: 3.75.

4. TRẦN MẠNH ĐỨC.

- Absence: -1 - 1.
- Early attendance: $0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25$.
- Bonus: $1.5 + 1 + 1.5 + 0.5$ (Stirling 2).
- Late: $18 + 7 + 30$ mins.
- Midterm: 5.75.

5. NGUYỄN TRUNG HẬU.

- Absence: -2 - 2 - 2 - 2 - 2 - 2 - 2 - 2.
- Early attendance: $0.25 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5$.
- Bonus: $1 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25$ (plane split) + $0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25$ (gen func) + $0.25 + 0.25 + 0.25 + 0.5$ (bowtie graph) + 0.5 (circuit) + $0.5 + 0.25 + 0.25$ (longest path method) + $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
Tối bài 26 p. 18
- Late: $24 + 20 + 10 + 70$ mins.
- Midterm: 0.75.

6. PHẠM PHƯỚC MINH HIẾU [PPMH].

- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $1 + 0.5 + 1$ (Stirling 2) + 1 (Stirling 2 Python) + 1.5 (int partition) + 1.5 (Stirling 1 Python).
Chấm report Hiếu week 1: B2 Catalan mã O+1 bạn hiếu sai đề: đề kêu chứng minh số cách đặt n dấu (&) đúng là số Catalan C_n , hông phải tính số Catalan số 4 nên +0. bài m số 0 & $n-m$ số 1, làm cách khác tui +1. Prob. 4 CM $|2^{[n]}| = 2^n$: +1. Prob. 5: dùng nguyên lý bao hàm-loại trừ chưa chặt chẽ, bài đó cần lý luận nhiều & khó hơn: +0.25. Prob. 6: +1. Prob. 1: +1. Prob. 2: +1.
Ex1.cpp: +0.5, Ex3: +0.5, Ex5.cpp: +1, Ex6.cpp: +1. Ex7.cpp: +1, Ex8.cpp & Ex9.cpp: +0 (bài toán khó hơn thế vì có thể có nhiều bộ điểm thẳng hàng nên việc mô tả cấu trúc hình học là phần khó chính)
- Midterm: 4.

7. HOÀNG QUANG HUY.

- Absence: -2 - 1.
- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $2 + 1.5$.
- Midterm: 5.25.

8. PHAN NGUYỄN DUY KHA.

- Absence: -1 - 1 - 2 - 2 - 1.
- Early attendance: $0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5$.
- Bonus: $1.5 + 1 + 1 + 1 + 1.5 + 1.5 + 1.5$ (\$\$).
- Late: 60 mins.
- Midterm: 7.

9. ĐẶNG PHÚC AN KHANG.

- Bonus: $0.5 + 1 + 1$.

10. PHẠM MINH KHOA.

- Absence: -2 - 2 - 1 - 1 - 2.
- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.25 + 0.5$.
- Bonus: 0 (midterm exam: cheat use phone)
- Late: 10 mins.
- Report: 0.

11. TRẦN THÀNH LỢI.

- Absence: -2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2.
- Early attendance: $0.25 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 0.25$.
- Bonus:
- Late: $23 + 60 + 15$ mins.
- Midterm: 0.

12. LÊ ĐỨC LONG.

- Absence: -2.
- Early attendance: $0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $1 + 0.5 + 1 + 1 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.5$ (type of graph) + $0.25 + 0.75 + 0.25 + 0.5 + 1$ (Christmas party) + $0.5 + 0.25 + 0.25 + 0.5$ (Python Euler candy) + $0.75 + 1$ (Euler candy gen func) + 0.5 (Python Pascal identity) + 0.5 (Catalan dp) + 0.5 (bracket sequences I) + $0.5 + 0$. (Stirling 2) + 0.5 (Stirling 1) + 0.5 (Bell) + 0.25 (Bell appo).
- Tối 19. CM Dijkstra p. 19
- Midterm: 6.

13. LÊ CÔNG HOÀNG PHÚC.

- Early attendance: $0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $1 + 1 + 1$ (induction).
- Late: $24 + 3 + 12$ mins.
- Midterm: 4.5.

14. HUỖNH NHẬT QUANG.

- Absence: -2 - 2 - 2 - 2 - 2 - 2.
- Early attendance: $0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25$.
- Late: $10 + 20 + 20 + 20 + 28 + 22 + 20$ mins.
- Midterm: 2.
- Bonus: $0.25 + 0.5 + 0.25 + 0.25 + 0.25$.
- Toi report week 2 p. 5.
- Comment: Không compile được file tex.

15. CAO SỸ SIÊU (CSS).

- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5 + 0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $1 + 1 + 1 + 0.5 + 1$ (derangement) + 0.75 (inclusion-exclusion) + 2 (PAC Catalan) + 1 (Catalan proof) + 2 (Pascal triangle) + $0.5 + 0.5 + 0.5 + 0.5 + 0.75$ (lack of graph isomorphism) + $1 + 1 + 0.25 + 0.5 + 1 + 2$ (Havel-Hakimi) + 1.5 (gen func) + 2.5 (proof Dijkstra) + $1 + 1 + 1 + 0.5 + 1 + 0.5 + 1 + 1 + 1$.
- To P. 10.2.12 p. 31
- Late: 8 mins.
- Midterm: 5.75.

16. SƠN TÂN [ST].

- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25$ + $0.5 + 0.25$.

- Bonus: $1 + 1 + 1.5 + 2$ (Linux).

Chấm report Sơn Tân: 0.25 (a) + 0.25 (b) + 0.25 (c) + 0.25 (e) + 0.25 (g, ghi sai mũ) + 0.25 (h) + 1.5 (Pascal, làm được cho $(\sum_{i=1}^m a_i)^n$ nhiều điểm hơn) + 2 (tính C_n^k) + 1 (graphic sequence) + 1.5 (Euler d) + 2.5^{***} (Euler).

- Midterm: 6.

17. NGUYỄN NGỌC THẠCH [NNT].

- Absence: -1.
- Early attendance: $0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.25$.
- Bonus: $3 + 1 + 1 + 1.5 + 2$ (Catalan) + 5 (Euler candy) + 2.5 (induction) + 1 (toss coin) + 1 (dice roll) + 1 (dice roll) + $1 + 1 + 2$ (combinator identity) + 1.5 (dollar) + $0.5 + 2.5 + 1.5 + 1 + 1 + 1 + 1 + 1.5 + 1 + 1.5$ (Stirling 2 recursive).
- Late: $5 + 23 + 34$ mins.
- Midterm: 8.25.

18. PHAN VINH TIẾN [PVT].

- Early attendance: $0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.25 + 0.25 + 0.5 + 0.25 + 0.5$.
- Bonus: $2 + 0.5$ (virus) + $1 + 2$ (binomial) + 1 (exp I) + 1 (exp II) + 1 (Stirling 2 DP) + 1 (Bell) + 1.5 (ads) + 1 (banana) + 0.5 (point location test) + 2 (IMO2007P1) + 2 (Newton binomial, multinomial thm) + 1.5 (count bit) + 1 (int partition).
- Late: $8 + 25 + 16$ mins + $48 + 14 + 10$.
- Midterm: 11.

3.1 Potential topics for midterm- & final exams

- Chứng minh bằng phương pháp quy nạp toán học.
- Bài toán chia kẹo Euler.
- Khai triển nhị thức Newton.
- Sử dụng định lý Euler & thuật toán Havel-Hakimi để chạy tay kiểm tra 1 dãy có phải là graphical sequence hay không. Vẽ đồ thị minh họa.
- Hàm sinh.
- Chạy tay thuật toán Dijkstra.
- Shortest path problem on graph – Bài toán đường đi ngắn nhất.

4 UMT Summer Semester 2025/1488: Introduction to AI

1. HỒ LÊ DUY.

- Absence: -2 - 2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Final assignment: -1.

2. TRƯƠNG CÔNG HOAN.

- Absence: -2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Final assignment: -1.

3. LỮ MINH HOÀNG.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Final assignment:

4. ĐINH KIM HƯNG.

- Absence: -1.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $3 + 3$.
-

- Final assignment: 1.
5. HUỖNH VÕ QUỐC KHÁNH.
- Absence: -2 - 2 - 2 - 2 - 2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5$.
6. NGUYỄN NHẬT KHÔI.
- Absence: -2 - 1 - 2 + 0.5.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
7. VÒNG LÝ NĂM PHÚC VLNP.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1.5 + 2$ (extended scheduling) + 3 (solve triangle ccc) + 3 (solve triangle gcg) + 3 (solve triangle gcg) + 2 (graph color) + 3 (A*) + 4 (TSP).
8. HẦU TRUNG THÀNH.
- Absence: -2 - 2 - 2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Late: 5 mins.
9. NGUYỄN THI.
- Absence: -2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2.
10. ĐẶNG NGUYỄN DUY TRƯỜNG.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.

5 UMT Summer Semester 2025/1493: Information Technology Fundamentals 2

1. CAO NGUYỄN GIA AN.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $3.5 + 2 + 2 + 2.5 + 2.5 + 1 + 1.5 + 1 + 1 + 1.5 + 2.5 + 1$ (eval func) + $1.5 + 2 + 2 + 2.5 + 1.25 + 1 + 1 + 0.5 + 1$ (Fib) + 1.5 (HN) + $2 + 2 + 2 + 2.5$ (partition) + $1.5 + 2 + 0.5 + 0.5 + 1 + 1$.
 - Midterm: 4.5.
2. HOÀNG TRÂM ANH.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1 + 2 + 2 + 2.5 + 1.5 + 0.5 + 1 + 1.5 + 0.5 + 1 + 1 + 1$.
 - Midterm: 8.
3. BÙI NGUYỄN MINH DŨNG.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2.5 + 2 + 2 + 2.5 + 2.5 + 1 + 1.5$.
 - Midterm: 10.
4. NGUYỄN NGỌC HÂN.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $0.5 + 1 + 1.5 + 0.5 + 1 + 1 + 1.5 + 1 + 1.5 + 2 + 2 + 2.5 + 0.5 + 1 + 1.5 + 1.5$.
 - Midterm: 7.
5. NGUYỄN THÀNH THÁI HIỆP.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $3 + 2 + 2 + 2.5 + 2.5 + 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 1.5 + 2.5$ (near perfect) + $2 + 2 + 0.5 + 0.5 + 1$ (sym num) + 1 (prime fact).
 - Midterm: 6.5.

6. VŨ NGUYỄN YẾN HOA.

- Absence: -2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $1 + 2 + 2.5 + 1 + 1.5 + 0.5 + 1$ (eval func) $+ 1.5 + 2 + 1 + 1.5 + 2 + 1 + 0.5 + 1 + 1 + 1 + 2$.
- Midterm: 6.

7. ĐỖ HUY HOÀNG.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: 1 (Fib) $+ 1.5 + 2 + 1.5 + 0.5 + 0.5 + 1 + 1 + 2$.
- Midterm: 3.5.

8. NGUYỄN GIA HUY.

- Absence: -2 - 2 - 2 - 2 - 2.
- Early attendance: $0.5 + 0.5 + 0.5$.
- Early attendance: $0.5 + 1$ (eval func) $+ 1.5 + 2 + 2 + 2.5 + 1 + 0.5$.
- Midterm: 5.5.

9. PHẠM LÂM GIA KHÁNH.

- Absence: -2 - 2.
- Early attendance: $0.5 + 0.5$.
- Late: 15 mins.
- Bonus: $0.5 + 0.5 + 1 + 1.5 + 2 + 1.5 + 1 + 2$.
- Midterm: 5.5.

10. PHẠM XUÂN KHÁNH.

- Absence: -2 - 1 - 2 - 2 - 2.
- Early attendance: $0.5 + 0.5$
- Late: $15 + 30$ mins.
- Bonus: $2 + 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 2 + 0.5 + 0.5 + 1 + 1 + 1 + 1$.
- Midterm: 10.25.

11. BÙI ĐỨC KHOA.

- Absence: -2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $0.5 + 2 + 1$ (eval func) $+ 1.5 + 0.5 + 1.5 + 2 + 0.5 + 1 + 1$.
- Midterm: 3.

12. TRẦN VŨ NGUYỄN KHÔI.

- Absence: -1 - 2 - 2.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Late: 20 mins.
- Bonus: $3 + 2 + 2 + 1 + 1.5 + 1 + 1.5 + 1 + 1.5 + 2 + 2$ (near perfect) $+ 2 + 2.5 + 0.5 + 1$ (Fib) $+ 0.5 + 0.5 + 1 + 1$ (sort str).
- Midterm: 5.25.

13. VŨ THỊ NGỌC LAN.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
- Bonus: $2.5 + 2 + 2 + 2.5 + 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 1.5 + 2 + 2 + 2.5 + 1 + 0.5 + 1 + 2 + 3$.
- Midterm: 10.5.

14. TRẦN VĂN LÊN.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.

- Bonus: $0.5 + 2 + 2 + 2.5 + 2.5 + 1 + 1.5 + 1 + 1 + 1.5 + 1$ (eval func) + $1.5 + 2 + 2 + 2.5 + 1 + 0.5 + 1.5 + 2 + 1.5 + 0.5 + 0.5 + 1 + 1 + 1$ (prime Fibo).
 - Midterm: 4.
15. THÁI ANH NHẬT THIÊN LONG.
- Absence: -2 - 2 - 2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2 + 2 + 2.5 + 1.5 + 1$.
 - Midterm: 7.5.
16. LÊ NGUYỄN BẢO NGỌC. Tristy.
- Absence: -2 - 1 - 2 - 2 - 2 - 2.
 - Late: $15 + 15 + 10 + 92$ mins.
 - Bonus: $1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 1.5 + 2 + 1.5 + 2$ (Pascal triangle) + $0.5 + 1 + 1 + 1$ (prime Fibo).
 - Midterm: 9.75.
17. LÊ HỒNG NGỌC.
- Absence: -2 - 1.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2 + 2.5 + 1$ (eval func) + $1.5 + 2 + 2 + 0.5 + 1$ (Fib) + $2.5 + 1.5 + 2 + 1 + 0.5 + 0.5 + 1 + 1$ (prime Fibo) + 1 (sort str) + 1.
 - Midterm: 8.75.
18. NGUYỄN HỮU NHÂN.
- Absence: -2 - 2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5$.
 - Bonus: $0.5 + 1.5 + 2 + 0.5 + 0.5 + 1 + 1 + 1 + 1 + 1 + 2$.
 - Late: $15 + 15$ mins.
 - Midterm: 3.5.
19. LÂM THIÊN NHÂN.
- Absence: -2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2.5 + 1 + 1$.
 - Midterm: 5.
20. PHẠM MINH NHẬT.
- Absence: -2
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1.5 + 2 + 2 + 2.5 + 1 + 1.5 + 2 + 0.5 + 1 + 1.5 + 1$.
 - Midterm: 6.75.
21. PHẠM QUỲNH NHƯ.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: 1 (eval func) + 2.
 - Midterm: 8.25.
22. NGUYỄN NGỌC QUỲNH NHƯ.
- Absence: -2 - 2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Midterm: 8.
23. ĐOÀN TRƯỞNG THIÊN PHONG.
- Absence: -2 - 2.

- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Midterm: 7.
24. HỒ TẤN TÀI.
- Absence: -2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1.5 + 2 + 2 + 1 + 0.5 + 1 + 1 + 1.5 + 2 + 1.5$.
 - Late: $10 + 20 + 15 + 43$ mins.
 - Midterm: 10.
25. HỒ QUỐC THÀNH.
- Absence: -2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $1 + 1.5 + 1 + 1 + 1.5 + 1 + 0.5 + 1 + 2$.
 - Midterm: 4.5.
26. NGUYỄN THỊ MINH THƯ.
- Absence: -2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2.
 - Midterm: 0.
27. ĐỖ THỊ HẢI TÌNH.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $2 + 2 + 2.5 + 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 1.5 + 2 + 0.5$.
 - Midterm: 9.75.
28. VÕ ĐOÀN THÁI TOÀN.
- Absence: -2.
 - Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$.
 - Bonus: $0.5 + 2 + 2 + 1 + 0.5 + 1 + 1 + 1.5 + 2 + 2.5 + 0.5 + 1$.
 - Midterm: 9.
29. TRẦN QUỐC TRUNG.
- Early attendance: $0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5$
 - Bonus: $0.5 + 2 + 2 + 2.5 + 1 + 0.5 + 1.5 + 1 + 1.5 + 2 + 0.5 + 1$.
 - Midterm: 8.25.

6 Olympic Tin OLP ICPC

1. ĐOÀN NGUYỄN ĐĂNG KHOA [DNDK]. K3.
 - Bonus: 0.5 (weird alg) + 0.5 (miss number) + 0.5 (repetition) + 0.5 (increase array) + 0.5 (permutation) + 0.5 (num spiral) + 0.5 (bit string) + 0.5 (trailing zero) + 0.5 (coin pile) + 0.5 (IMO2007P5) + 0.5 (hangover) + 0.5 (sum) + 0.5 (ugly number) + 0.5 (speed limit) + 0.5 (self num) + 0.5 (gold coin) + 0.25 (3n + 1 prob) + 0.5 (Hanoi tower).
2. ĐỖ ANH KIẾT [DAK].
 - Bonus: 0.5 (virus) + 1 (count rooms) + 1 (dice) + 1.5 (shortest route I) + 1 (distribute apple) + 3 (permutation order) + 0.25 (trailing zero) + 0.5 (Raab game) + 2.5 (IMO2007P3) + 0.25 (hangover) + 1.5 (count bit) + 0.75 (grid color I).
3. TRẦN QUANG SƠN [TQS]. K3.
 - Bonus: $0.5 + 1$ (prime) + 1 (houseboat) + 0.5 (weird alg) + 0.5 (miss number) + 0.5 (repetition) + 0.5 (increase array) + 0.5 (num spiral) + 0.5 (bit string) + 0.5 (trailing 0) + 0.5 (coin pile) + 0.5 (IMO2007P5) + 0.5 (speed limit) + 0.5 (ride to school) + 0.5 (self num) + 0.5 (bee) + 0.5 (gold coin) + 0.25 (3n + 1 prob) + 0.5 (Pascal lib) + 0.5 (tribonacci) + 0.25 (divisor game).
4. PHẠM ĐĂNG HOÀNG THIÊN [PDHT]. K3.
 - Bonus: $0.5 + 1$ (houseboat) + 2 (remove digit) + 1.5 (next prime) + 2 (Christmas party).

7 Miscellaneous