Advanced STEM Students

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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.

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

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

- 1. TRẦN THANH CƯỜNG.
 - Absence: -2.
 - Early attendance: 0.5 + 0.5 + 0.5.
 - Bonus:
- 2. HUỲNH LÂM VŨ ĐÌNH.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 3. Trương Công Hoan.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 4. Nguyễn Huy Hoàng [NHH].

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- Early attendance: 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).
- 5. Lữ Minh Hoàng.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 6. Hà Quang Huy.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 7. NGUYỄN BẢO KHÁNH.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1 + 2 + 1 + 0.5 + 1 + 1.5 (l'Hospital).
- 8. NGUYỄN LÊ ĐĂNG KHOA [NLDK].
 - Early attendance: 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) + sum (0.25) + 0.25 (humidex) + 0.25 (specialized 4-digit num) + 0.25 (quicksum) + 0.25 (Dirichlet).
- 9. Phan Gia Lạc [PGL].
 - Early attendance: 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).
- 10. Phan Phương Phi [PPP].
 - Early attendance: 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.
- 11. Đặng Minh Phương.
 - Early attendance: 0.5 + 0.5 + 0.5.
 - Absence: -2.
 - Bonus:
- 12. Nguyễn Hoàng Quân.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1.
- 13. Đường Nguyễn Minh Sơn.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 14. Hấu Trung Thành.
 - Absence: -2 2 2.
 - Early attendance: 0.5.
- 15. Tạ Minh Thiện.

- Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
- Bonus: 1.
- 16. LÊ NGUYỄN QUỐC TOÀN.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 2.
- 17. Nguyễn Hoàng Ngọc Trân.
 - Absence: -2 2 2 2.
 - Bonus:
- 18. Nguyễn Anh Tuyển.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus:
- 19. Nguyễn Như Ý.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 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.
 - Bonus:
- 2. Nguyễn Bảo Anh.
 - Early attendance: 0.75 + 0.75 + 0.75.
 - Late: 5 mins.
- 3. Cao Gia Bảo.
 - Absence: -2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 4. Vũ Văn Đạt.
 - Absence: -2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1 + 0.5.
- 5. TRẦN VĂN HÂU.
 - Absence: -2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1.
- 6. Nguyễn Ngọc Bích Hiền [NNBH].
 - \bullet Early attendance: 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.
 - Early attendance: 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.
 - 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).
- 9. Trần Lê Gia Huy.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 10. TRẦN QUANG HUY.
 - Absence: -2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75.
 - Late: 22 mins.
- 11. Đặng Phúc An Khang [DPAK].
 - Absence: -2 2.
 - Early attendance: 0.75 + 0.75 + 0.75.
 - Late: 15 + 52 mins.
 - Bonus: 0.5 + 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).
- 12. Lương Quốc Khánh.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1 + 1 + 1 + 1.
- 13. Nguyễn Hà Đăng Khoa.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1 + 0.5.
- 14. Nguyễn Huy Đăng Khoa.
 - Absence: -1 2.
 - Early attendance: 0.75 + 0.75 + 0.75.
- 15. HUỳNH Đỗ ĐĂNG KHOA.
 - Late: 23 + 45 + 25 + 20 + 10 mins.
 - Early attendance: 0.75.
- 16. TRẦN TRUNG KIÊN.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 17. Nguyễn Huỳnh Chí Lâm.
 - Early attendance: 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.
 - Bonus: 1 + 1 + 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.
 - Bonus: 0.25 + 1.
- 20. Nguyễn Lương Nghĩa [NLN].
 - Early attendance: 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).
- 21. TRẦN PHÚC NGUYÊN.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 22. Bùi Văn Nhớ.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Late: 40 mins.
 - Bonus: 1 + 1 + 1 + 1 + 3 + 0.75.
- 23. Lê Thanh Tân.
 - Absence: -1 1 2.
 - Early attendance: 0.75 + 0.75.
 - Late: 5 mins.
- 24. Huỳnh Thị Kiều Thu.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1 + 1 + 1 + 1.5 + 1.5 + 1.
- 25. Hoàng Nghĩa Tín.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 26. Hoàng Anh Tuấn.
 - Absence: -2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 27. Ngô Thanh Tùng.
 - Absence: -2 2.
 - Early attendance: 0.75 + 0.75.
 - Late: 29 + 15 mins.
- 28. Ngô Hoàng Tùng [NHT].
 - Early attendance: 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 (virus) + 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).
- 29. Trần Mộng Tuyền.
 - Absence: -1.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75 + 0.75.
- 30. Nguyễn Quang Vỹ.
 - Absence: -1 2.
 - Early attendance: 0.75 + 0.75 + 0.75 + 0.75.
 - Bonus: 1.5 + 4 + 1 + 1.5.

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
 - Bonus: 0.75 + 1 + 2 + 1.5 + 0.5 + 0.5 + 0.5 (Fibonacci + Lucas) + 0.5 (virus) + 2.5 (gen func) + 2.5 (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 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) + 1.5 (spanning tree) + 1.5 (tiling) + 1.5 (weird alg) + 1.5 (repetition) + 1.5 (miss number) + 1.5 (increase array) + 1.5 (permutation) + 1.5 (line segment intersection) + 1.5 (graph representation converters).
- 2. Hoàng Anh [HA].
 - Early attendance: 0.25 + 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).
- 3. VÕ HUỲNH THÁI BẢO.
 - Early attendance: 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25 + 0.25
 - Late: 7 mins.
 - Bonus:
- 4. TRẦN MANH Đức.
 - Absence: -1.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.5.
 - Bonus: 1.5 + 1 + 1.5 + 0.5 (Stirling 2).
 - Late: 18 + 7 mins.
- 5. Nguyễn Trung Hâu.
 - Absence: -2 2 2 2.
 - Early attendance: 0.25 + 0.25 + 0.25.
 - Bonus: 1.
 - Late: 24 + 20 mins.
- 6. Phạm Phước Minh Hiếu.
 - Early attendance: 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).

Chấm report Hiếu week 1: B2 Catalan mã O+1 bạn hiểu 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 $|2^{\lceil}n]|=2^n$: +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)

- 7. Hoàng Quang Huy.
 - Absence: -2 1.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25.
 - Bonus: 2 + 1.5.
- 8. Phan Nguyễn Duy Kha.
 - Absence: -1 1 2.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.25 + 0.25.
 - Bonus: 1.5 + 1 + 1 + 1 + 1.5 + 1.5 + 1.5 (\$).
 - Late: 60 mins.

- 9. Đặng Phúc An Khang.
 - Bonus: 0.5 + 1 + 1.
- 10. Phạm Minh Khoa.
 - Absence: -2 2 1.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.25.
 - Bonus:
 - Late:
- 11. TRẦN THÀNH Lợi.
 - Absence: -2 2 2 2.
 - Early attendance: 0.25 + 0.25.
 - Bonus:
 - Late: 23 + 60 mins.
- 12. Lê Đức Long.
 - Absence: -2.
 - Early attendance: 0.25 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5.
 - Bonus: 1 + 0.5 + 1 + 1.
- 13. LÊ CÔNG HOÀNG PHÚC.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.25 + 0.25 + 0.5 + 0.5.
 - Bonus: 1 + 1 + 1 (induction).
 - Late: 24 + 3 + 12 mins.
- 14. Huỳnh Nhật Quang.
 - Absence: -2 2.
 - Early attendance: 0.25 + 0.25.
 - Late: 10 + 20 + 20 + 20 mins.
 - Bonus:
- 15. Cao Sỹ Siêu.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5.
 - Bonus: 1 + 1 + 1.
- 16. Sơn Tân [ST].
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.25 + 0.5 + 0.5.
 - Bonus: 1 + 1 + 1.5.
 - 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).
- 17. NGUYỄN NGỌC THẠCH [NNT].
 - Early attendance: 0.25 + 0.25 + 0.5 + 0.25 + 0.5.
 - Bonus: 3 + 1 + 1 + 1.5 + 2 (Catalan) + 5 (Euler candy) + 2.5 (induction) + 1 (toss coin) + 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.
- 18. Phan Vĩnh Tiến [PVT].
 - Late: 8 + 25 + 16 mins + 48.
 - Early attendance: 0.25 + 0.5 + 0.25 + 0.5 + 0.25.
 - 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).

3.1 Potential topics for midterm- & final exams

- Chứng minh bằng phương pháp quy nạp toán học.
- Bài toán chia keo Euler.
- Khai triển nhi 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.
- 2. Trương Công Hoan.
 - Absence: -2.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
- 3. Lữ Minh Hoàng.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
- 4. DINH KIM HUNG.
 - Absence: -1.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 3.
- 5. HUỳNH VÕ QUỐC KHÁNH.
 - Absence: -2 2 2 2.
 - Early attendance: 0.5 + 0.5.
- 6. Nguyễn Nhật Khôi.
 - Absence: -2 1 2.
 - Early attendance: 0.5 + 0.5 + 0.5.
- 7. VÒNG LY NÀM PHÚC VLNP.
 - Early attendance: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1.5 + 2 (extended scheduling) + 3 (solve triangle).
- 8. Hầu Trung Thành.
 - Absence: -2 2 2 2.
 - Early attendance: 0.5 + 0.5.
 - Late: 5 mins.
- 9. Nguyễn Thi.
 - Absence: -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.

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

- 1. Cao Nguyễn Gia An.
 - Early attendence: 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 + 2.5 (partition).
 - Midterm: 4.5.
- 2. Hoàng Trâm Anh.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1 + 2 + 2 + 2.5 + 1.5 + 0.5 + 1 + 1.5.
 - Midterm: 8.
- 3. Bùi Nguyên Minh Dũng.
 - Early attendence: 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 attendence: 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.
 - Midterm: 7.
- 5. Nguyễn Thành Thái Hiệp.
 - Early attendence: 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 + 2.5 + 2.5 + 1.5
 - Midterm: 6.5.
- 6. Vũ Nguyễn Yến Hoa.
 - Absence: -2.
 - Early attendence: 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.
 - Midterm: 6.
- 7. Đỗ Huy Hoàng.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 1 (Fib) + 1.5 + 2.
 - Midterm: 3.5.
- 8. Nguyễn Gia Huy.
 - Absence: -2 2 2.
 - Early attendence: 0.5 + 0.5.
 - Early attendence: 0.5 + 1 (eval func) + 1.5 + 2 + 2 + 2.5 + 1 + 0.5.
 - Midterm: 5.5.
- 9. Pham Lâm Gia Khánh.
 - Absence: -2.
 - Early attendence: 0.5 + 0.5.
 - Late: 15 mins.
 - Bonus: 0.5 + 0.5 + 1 + 1.5 + 2.
 - Midterm: 5.5.
- 10. Pham Xuân Khánh.
 - Absence: -2 1 2.

- Early attendence: 0.5
- Late: 15 + 30 mins.
- Bonus: 2 + 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 2.
- Midterm: 10.25.
- 11. Bùi Đức Khoa.
 - Absence: -2.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 0.5 + 2 + 1 (eval func) + 1.5 + 0.5.
 - Midterm: 3.
- 12. TRẦN VŨ NGUYÊN KHÔI.
 - Absence: -1.
 - Early attendence: 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).
 - Midterm: 5.25.
- 13. Vũ Thị Ngọc Lan.
 - Early attendence: 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.
 - Midterm: 10.5.
- 14. TRẦN VĂN LÊN.
 - Early attendence: 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.
 - Midterm: 4.
- 15. Thái Anh Nhật Thiên Long.
 - Absence: -2 2 2 2.
 - Early attendence: 0.5 + 0.5 + 0.5.
 - Bonus: 2 + 2 + 2.5.
 - Midterm: 7.5.
- 16. LÊ NGUYỄN BẢO NGỌC.
 - Absence: -2 1 2 2.
 - Late: 15 + 15 mins.
 - Bonus: 1 + 1.5 + 0.5 + 1 + 1.5 + 1 + 1.5 + 2.
 - Midterm: 9.75.
- 17. LÊ HỒNG NGOC.
 - Absence: -2 1.
 - Early attendence: 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.
 - Midterm: 8.75.
- 18. Nguyễn Hữu Nhân.
 - Absence: -2 2 2.
 - Early attendence: 0.5 + 0.5.
 - Bonus: 0.5.
 - Late: 15 mins.
 - Midterm: 3.5.

- 19. Lâm Thiện Nhân.
 - Absence: -2.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 2.5 + 1 + 1.
 - Midterm: 5.
- 20. Pham Minh Nhật.
 - Absence: -2
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1.5 + 2 + 2 + 2.5 + 1 + 1.5 + 2 + 0.5 + 1.
 - Midterm: 6.75.
- 21. Phạm Quỳnh Như.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1 (eval func)
 - Midterm: 8.25.
- 22. NGUYỄN NGỌC QUỲNH NHƯ.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Midterm: 8.
- 23. Đoàn Trương Thiên Phong.
 - Absence: -2 2.
 - Early attendence: 0.5 + 0.5 + 0.5.
 - Midterm: 7.
- 24. Hồ Tấn Tài.
 - Absence: -2.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1.5 + 2 + 2 + 1 + 0.5 + 1 + 1 + 1.5 + 2.
 - Late: 10 mins.
 - Midterm: 10.
- 25. Hồ Quốc Thành.
 - Early attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 1 + 1.5 + 1 + 1 + 1.5 + 1 + 0.5.
 - Midterm: 4.5.
- 26. Nguyễn Thi Minh Thư.
 - Absence: -2 2 2 2 2 2.
 - Midterm: 0.
- 27. Đỗ THỊ HẢI TÌNH.
 - Early attendence: 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.
 - \bullet Midterm: 9.75.
- 28. VÕ ĐOÀN THÁI TOÀN.
 - Early attendence: 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 attendence: 0.5 + 0.5 + 0.5 + 0.5 + 0.5 + 0.5.
 - Bonus: 0.5 + 2 + 2 + 2 + 2.5 + 1 + 0.5 + 1.5 + 1 + 1.5 + 2 + 0.5.
 - 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).
- 2. Đỗ ANH KIỆT [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).
- 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).
- 4. Phạm Đăng Hoàng Thiên [PDHT]. K3.
 - Bonus: 0.5 + 1 (houseboat) + 2 (remove digit) + 1.5 (next prime) + 2 (Christmas party).

7 Miscellaneous