

Artificial Intelligence

COL333/COL671

COL7333/AIL7025

Mausam

Personnel

- Instructor: Mausam, SIT 402, mausam@cse.iitd.ac.in
- TAs:
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Logistics

- Timings: Tue/Thu/Fri 11-12 in LH108
- Office hours
 - By appointment
- Course Website:
www.cse.iitd.ac.in/~mausam/courses/col333/autumn2025
- Join class discussion group on Piazza (access code col333)
https://piazza.com/iit_delhi/fall2025/col333/home
- Textbook:
Artificial Intelligence: A Modern Approach (4th edition), Russell and Norvig
- Communication: Piazza (no email)

(Not a New) Experiment

- Flipped classroom
 - 3 hours of videos per week (not in class)
- Classroom
 - Revision of key points
 - Discussion (if you have watched videos)
 - Additional information
 - Advanced topics
 - Practice questions
 - ~1 Quiz per week
 - Remove weakest two scores in quizzes

Programming Assignments

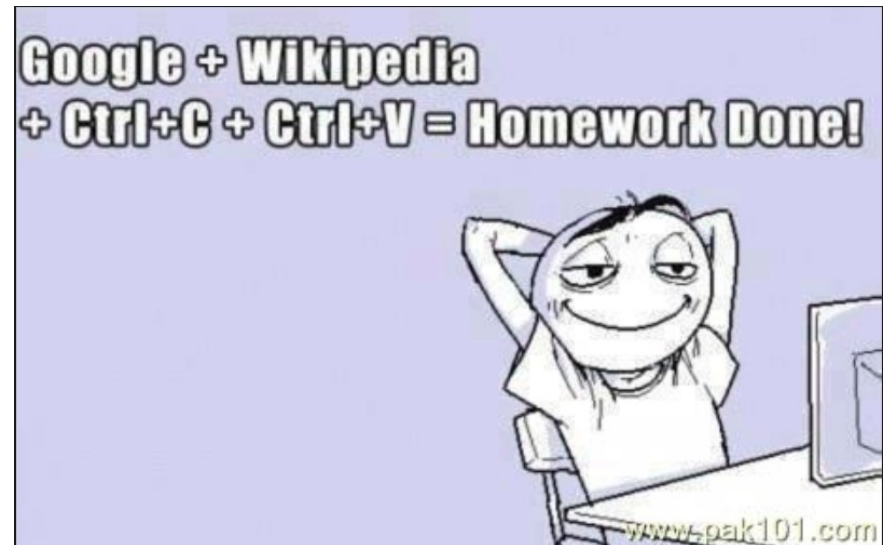
- 5 programming assignments; one of them in two parts
 - some assignments may be done in teams of two (as per instructions)
 - no team can be repeated for a second assignment (COL333)
 - no team can be repeated for a third assignment (COL671/COL7333/AIL7025)
 - late policy (penalty of 10% every day)
 - I/O error (penalty of 20%)
 - Logical error (penalty of 50% only under special permission)

Grading

- Grading:
 - 40% assignments
 - 18% midterm
 - 27% major
 - 15% quizzes
 - Extra credit: constructive class participation, and discussion group participation
- Audit
 - 50% absolute in exams
 - C in course
- I believe in making course demanding rather than grading harsh
 - Make your life this semester miserable, rather than GPA beyond it low 😊

Academic Integrity

- Cheating → negative penalty (and possibly more)
 - Exception: if one person/team is identified as cheater
 - Non-cheater gets a zero
- Collaboration is good!!! Cheating is bad!!! Who is a cheater?
 - No sharing of part-code
 - No written/soft copy notes
 - Right to information rule
 - Kyunki saas bhi kabhi bahu thi Rule



Class Requirements & Prereqs

- Class requirements
 - Uses a variety of skills / knowledge:
 - Probability and statistics
 - Boolean Logic
 - Algorithms
 - Above average coding skills
 - You will often have to work to fill the gaps
- Official Prerequisites
 - Data structures
- Unofficial Prerequisites
 - A willingness to learn whatever background you are missing

Languages

- English 😊
- C++/Java/Python
 - Coding efficiency : python
 - Program efficiency : C++
- Your choice of language may give unfair disadvantage to you!

Class Size

- Currently enrolled: don't know
- Expect to take: 150 (COL333), 75 (COL671).
- Others (fill the form on the course webpage)
 - <https://forms.gle/2qkiERZ7haJD3qyQ9>
 - Grade in data structures
 - Total GPA
 - Minor degree: prev courses and grades
 - Prev relevant coursework (and grade)
 - Prev relevant project (and grade, if applicable)

Goals of this course

- A brief intro to the philosophy of AI
- A brief intro to the breadth of ideas in AI
- A brief intro to very recent advances in AI(?)
- General computer scientist
 - general tools to aid in attacking a new problem
- Serious AI enthusiast
 - A primer from which to launch advanced study

Theory vs. Modeling vs. Applications

- Lecture balance tilted towards modeling
- Assignment balance tilted towards applications
- Relatively few theorems and even fewer proofs
- Desired work – lots!