

## MATH 341 101 Introduction to Discrete Mathematics

Web-Oriented Course	Tue Thu	14:00	15:30
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Pre-reqs: One of [MATH 220](#), [MATH 223](#), [MATH 226](#), [CPSC 121](#).

Instructor: Jozsef Solymosi

All course material will be hosted on the [Canvas](#) course page.

We will loosely follow the book “*Combinatorics : a very short introduction*” by Robin Wilson. The UBC Library link is: <https://courses.library.ubc.ca/i.JvjBP6>

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- **1. What is combinatorics?**
  - **2. Four types of problems**
  - **3. Permutations and combinations**
  - **4. A combinatorial zoo**
  - **5. Tilings and polyhedra**
  - **6. Graphs**
  - **7. Square arrays**
  - **8. Designs and geometry**
  - **9. Partitions**

We will spend (typically) 3 lectures on each topic. The lectures will be recorded and posted on Canvas.

There will be an exam week when you have two chances to write a midterm and only the best will count. (I will post a detailed explanation of the rules later).

There will be regular homeworks posted on Canvas. You have to type the answers using a technical typesetting system, called LaTeX. In case you don't know it: LaTeX is very easy to learn and it will be useful in your future studies and work. I suggest using the online system, Overleaf.

<https://www.overleaf.com/>

You should submit your solutions in a pdf file generated by the latex editor. I will post the questions in tex, so you can easily edit the file to write your answers directly there.

For learning goals and other details about the course please refer to the intro letter I sent you (also available on Canvas).

This term we will be using Piazza for class discussion. The system is highly catered to getting you help fast and efficiently from classmates and the TA. Rather than emailing questions, I encourage you to post your questions on Piazza. (Starting Sept. 8.)

Find our class page [here](#).

Academic Integrity: The Mathematics Department strictly enforces UBC's Academic Integrity Code.

Statement on UBC's Policies and Resources to Support Student Success:

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available [here](#).