## LAWRGE 2023 NOTES

## Contents

| 1.  | Introduction           | 1 |
|-----|------------------------|---|
| 2.  | Lecture 1 (Monday)     | 1 |
| 3.  | Lecture 2 (Monday)     | 2 |
| 4.  | Lecture 3 (Monday)     | 2 |
| 5.  | Lecture 4 (Monday)     | 2 |
| 6.  | Lecture 5 (Tuesday)    | 2 |
| 7.  | Lecture 6 (Tuesday)    | 2 |
| 8.  | Lecture 7 (Tuesday)    | 2 |
| 9.  | Lecture 8 (Tuesday)    | 2 |
| 10. | Lecture 9 (Wednesday)  | 2 |
| 11. | Lecture 10 (Wednesday) | 2 |
| 12. | Lecture 11 (Wednesday) | 2 |
| 13. | Lecture 12 (Wednesday) | 2 |
| 14. | Lecture 13 (Thursday)  | 2 |
| 15. | Lecture 14 (Thursday)  | 2 |
| 16. | Lecture 15 (Friday)    | 3 |
| 17. | Lecture 16 (Friday)    | 3 |
| 18. | Lecture 17 (Friday)    | 3 |
| 19. | Lecture 18 (Friday)    | 3 |

## 1. Introduction

Here is a template for a simple commutative diagram in tikz:

$$X' \xrightarrow{f'} Y'$$

$$h' \downarrow \qquad \qquad \downarrow h$$

$$X \xrightarrow{f} Y$$

## 2. Lecture 1 (Monday)

Hey this happened on Monday at 9

3. Lecture 2 (Monday)

Hey this happened on Monday at 9

4. Lecture 3 (Monday)

Hey this happened on Monday at 9

5. Lecture 4 (Monday)

Hey this happened on Monday at 9

6. Lecture 5 (Tuesday)

Hey this happened on Monday at 9

7. Lecture 6 (Tuesday)

Hey this happened on Monday at 9

8. Lecture 7 (Tuesday)

Hey this happened on Monday at 9

9. Lecture 8 (Tuesday)

Hey this happened on Monday at 9

10. Lecture 9 (Wednesday)

Hey this happened on Monday at 9

11. Lecture 10 (Wednesday)

Hey this happened on Monday at 9

12. Lecture 11 (Wednesday)

Hey this happened on Monday at 9

13. Lecture 12 (Wednesday)

Hey this happened on Monday at 9

14. Lecture 13 (Thursday)

Hey this happened on Monday at 9

15. Lecture 14 (Thursday)

Hey this happened on Monday at 9

- 16. Lecture 15 (Friday)
- 17. Lecture 16 (Friday)
- 18. Lecture 17 (Friday)
- 19. Lecture 18 (Friday)