Sample Title

• • •

Course Code

Arnav Goyal

Winter ’23-’24

CONTENTS

1 chapter
1.1 section . . . . .
1.2 boxes . . . . .
1.3 code . . . . .
1.4 keyword . . . . .
1.5 definition & theory . . . . .

2 complex analysis
2.1 complex contour integration . . . . .

PREFACE

The purpose of this document is to act as a comprehensive note for my understanding on the subject matter. I may also use references aside from the lecture material to further organize my understanding, and these references will be listed under this portion.

In general this document follows the format of highlighting keywords in green. I can also introduce a *Definition* or a *Theorem*. There may also be various other things like code blocks which include `keywords` or `"strings"`. Remarks (similar to markdown style quotes). Or highlighted boxes. I might use these to organize things further if I deem necessary.

REFERENCES

- Provided Lecture Notes & Info on Course Website
- Applied Digital Signal Processing: Theory and Practice - G. Manolakis, K. Ingle

1 ~ CHAPTER

This is the chapter preface

1.1 ~ SECTION

Here is some example text …

SUBSECTION

Here is some text separated by a subsection

1.2 ~ BOXES

> This is a remark

> This is a highlight

> This is an outline
> …
> …
> …
> …

1.3 ~ CODE

```
1 print("Hello World")
2
3 # toggle flip-flops on rising edge clock
4 if (clk == HIGH):
5     DFF.update()
6     TFF.toggle()
7     JKFF.hold()
```

Snippet 1.1: Example Code

1.4 ~ KEYWORD

This is a keyword, these are `code` or `"string"` references.

1.5 ~ DEFINITION & THEORY

Definition Apples are a basic food

Theorem Kiwis are better than apples

2 ~ COMPLEX ANALYSIS

2.1 ~ COMPLEX CONTOUR INTEGRATION

Definition A complex contour integral is defined as an integral of the complex-valued function $f(z)$ over some closed curve C.

$$\oint_C f(z)\, dz \tag{2.1}$$

The definition of a complex contour integral can be seen in equation 2.1