UNC Charlotte Graduate School
Sample Pages for Dissertation and Thesis Formatting

To supplement our Manual of General Formatting Requirements, the following sample pages have been created to provide visual examples of what certain important parts of your dissertation or thesis should look like. We have highlighted a number of significant features in red. Be sure to pay special attention to the following:

- The title page should look just like our example: the text should be centered, the title should be in all caps, and the spacing between the lines of text should be exactly as we specify in red (You can download templates here)
- There is no page number on the title page. Numbering begins with Roman numeral ii on the copyright page. The numbering starts over again with Arabic numeral 1 on the first page following the front matter. In order to start the numbering over, you'll need to add a Next Page section break in Microsoft Word just before page 1.
- Make sure that your title and your name appear the same on the title page, abstract page, and in the metadata that you enter into ProQuest.
- Tables, figures, and text should not extend into the margins.
- You do not need to include corresponding page numbers on the list of abbreviations.
- The reference page included is a sample. Refer to your field's style guide (for example: MLA, APA, IEEE) for how to properly format your reference section.
- All appendices should have a name and should appear in the table of contents.

1 inch margin

No page number should appear on the title page.

1 inch
or 1 ½ inches in case of binding

1 inch

ENTER YOUR TITLE HERE

3 single spaces

by

1 single space

Your Name Here

4 single spaces

A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in
Your Major Here

1 single space

Charlotte

1 single space

2023

This text should reflect the title of your degree and should be followed by the year that you submit your work (which may not be the year you defend).

There should be no committee members' signatures on the title page that is submitted to ProQuest (however, a signed title page has to be sent as PDF to gradschoolforms@uncc.edu)

Approved by:

_____
Dr. John Doe

_____
Dr. Jane Doe

_____
Dr. James Doe

Page numbers begin on this page using lowercase Roman

ABSTRACT

YOUR NAME HERE. The Title of Your Dissertation or Thesis Should be in Title Caps. (Under the direction of DR. COMMITTEE CHAIR)

Please, follow these instructions!

Please use Times New Roman, and center and single space all of the text above this line. Your name and the name of your chair should be in all caps. The abstract itself should be double-spaced. There is no word limit for the abstract, and you can even add keywords to the metadata when you submit your work to ProQuest.

If you're unsure of how to write an abstract, there are many resources available online. Here is one way of describing the purpose of the abstract: "Abstracts present the essential elements of a longer work in a short and powerful statement. The purpose of an abstract is to provide prospective readers the opportunity to judge the relevance of the longer work to their projects. Abstracts also include the key terms found in the longer work and the purpose and methods of the research. Authors abstract various longer works, including book proposals, dissertations, and online journal articles. There are two main types of abstracts: descriptive and informative. A descriptive abstract briefly describes the longer work, while an informative abstract presents all the main arguments and important results."[1]

[1] With thanks to our colleagues at The Writing Center at the University of North Carolina at Chapel Hill. https://writingcenter.unc.edu/tips-and-tools/abstracts/

ACKNOWLEDGMENTS

Please, follow these instructions!

The important element in the Acknowledgments is simple courtesy in which there are usually two possible ingredients to consider. First you should acknowledge any significant help you received from any individual whether in your department or elsewhere. Specifically, you should acknowledge the source of special materials, documents, or equipment. Further, you should acknowledge the help of anyone who contributed significantly to the work or to the interpretation of the work. Second, you should acknowledge any outside source of financial assistance, such as grants, contracts, or fellowships. A word of caution is in order. Often it is wise to show the proposed wording of the Acknowledgments to the person whose help you are acknowledging. He or she might well believe that your acknowledgment is insufficient or (worse) that it is too effusive.

The dedication page is optional.

DEDICATION

I dedicate my dissertation work to my family and many friends. A special feeling of gratitude to my loving parents, Carlo and Marta Rossi whose words of encouragement and push for tenacity ring in my ears. My sisters Asia, Sofia and Giovanna have never left my side and are very special.

TABLE OF CONTENTS

List of tables

If table/figure captions are long you may prefer to single space them. (See Table 2 vs Table 5)

List of figures

long lines of text should not touch or overlap the page numbers; wrap long items to the next line

LIST OF ABBREVIATIONS

You do not need corresponding page numbers for your list of abbreviations.

ABA	abscisic acid
ABRE	abscisic acid response element ANOVA analysis of variance
BHT	butylated hydroxytoluene
cDNA	complementary DNA
DS	dextran sulfate
dATP	deoxyATP
ddATP	dideoxyATP
2,4-D	2,4-dichlorophenoxyacetic acid
EcMt	early cysteine-labeled metallothionein KN Kinetin
mAb	monoclonal antibody
mRNA	messenger RNA

The body of the text starts with page 1

Chapter 1: Introduction

Transposons are genetic elements that are mobile within a genome, therefore, they are one of the major causes of genomic variation (Lewin 1994). However, evidence is growing that transposable elements are capable of horizontal transfer. That is, they can move across genomes of different species (Prins and Zadocks 1992). Our laboratory is interested in the identification and characterization of bacterial transposon-like nucleotide sequences found in the wheat genome that may be an example of horizontal DNA transfer.

Reynolds and Kitto (1992) screened a Mexican spring wheat (Triticum aestivum cv.Pavon) cDNA library to identify genes expressed specifically during pollen embryogenesis. After sequencing unique clones from this library, four sequences were found that showed high homology to the bacterial transposon, Tn1721. This transposon was derived from a gram-negative bacterium and is a Tn3-like transposon found in the Tn21 subgroup (Grinstead et al. 1990). It is a unique sequence since it contains a basic transposon (Tn1722) that is capable of independent transpososition. As shown in Figure 1, Tn1722 contains an open reading frame that encodes a 525 amino acid chemotaxic protein (Allmeier et al. 1992). The Tn1722 portion of the transposon contains the tnpR and tnpA genes which are utilized during the genetic resolution and integration of either the major or minor sequences. The entire transposable element also include three inverted repeats which function as the insertion and excisions sites for the transposon.

Make sure all tables / figures / appendices fit within the margins, which should be at least 1 inch on all sides

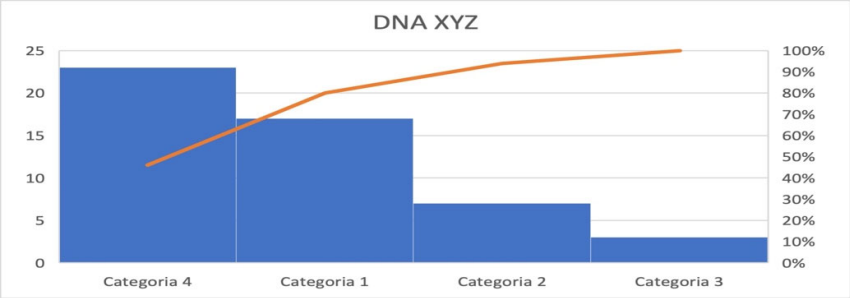
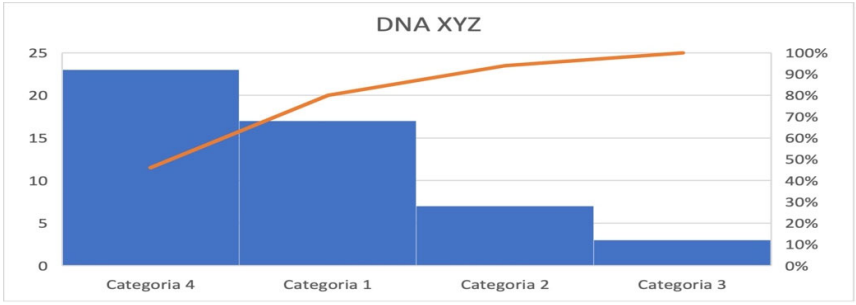
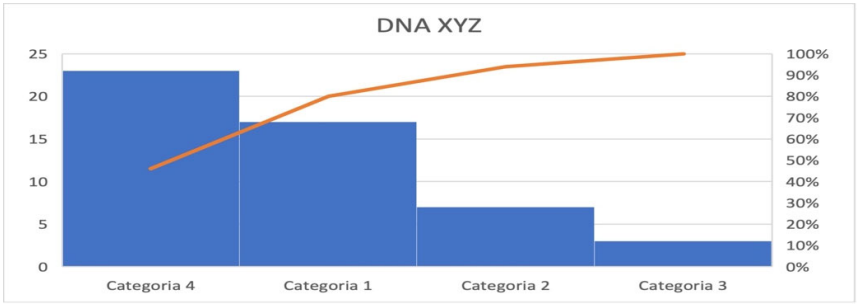


Figure extends into the left margin

Figure extends into the right margin





Correct! Figure inside margins

References

Allmeier H, B Cresnar, M Greck, and R Schmidt. 1992. Complete nucleotide sequence of Tn1721: gene organization and a novel gene product with the features of a chemotaxic protein. Gene 111: 11-20.

Gierl A and H Saedler. 1992. Plant transposable elements and gene tagging. Plant Molec Biology 19: 39-49.

Herman H, M Jacobs, JB Clark and MN Majerius. 1990. Plant chromosome-marker gene fusion assay for the study of normal and truncated T-DNA insertion events. Molec Gen Genetics 224: 248-252.

Houck MA, D Hurst, MN Majerius. 1992. Selfish genes move sideways. Nature 359: 659-660.

Lewin B. 1994. Genes V. Oxford University Press, Oxford.

Melanson D. 1995. Molecular characterization of nucleotide sequences from bread wheat (Triticum aestivum) which show homology to the gram-negative bacterial transposon, Tn1721. Master's Thesis, University of North Carolina at Charlotte, Charlotte, North Carolina.

Prins TW and JC Zadoks. 1994. Horizontal gene transfer in plants, a biohazard? Euphytica 76: 133-138.

Reynolds, TL. 1993. A cytological analysis of microspores of Triticum aestivum (Poaceae) during normal ontogeny and induced embryogenic development. Plant Physiol 80: 596-605.

Reynolds, TL. 1994. Vector DNA artifacts in the nucleotide sequence database. BioTechniques 16: 1124-1125.

Schmitt R, E Bernhardt, and R. Mattes. 1996. Characterization of Tn1721, a new transposon containing the tetracycline resistance genes capable of amplification. Molec Gen Genetics 172: 53-65.

Sigee DC. 1993. Bacterial plant pathology: the myth and the legends. Cambridge University Press, London.

Tienes RF, GH Waggnor, LJ Phillips, and YMN Bajaj. 1995. Are transposons capable of horizontal movement between species? Molec Biology 56: 1025-1034.81 at www.gmail.com

All appendices should have a name and should appear in the contents.

Appendix A: PCR optimization

The optimization of the PCR reactions were conducted on the bacterial plasmid pJOE105, which contains the entire Tn1721 transposon. This optimization required three independent experiments to determine the best parameters for each set of primers: MgCl2 concentration, target DNA concentration, and thermal cycling parameters.

Magnesium provides the divalent cations required by the DNA polymerase to function. The MgCl2 concentrations were optimized by titration reactions ranging from 1.55 mM to 3.55 mM final concentration in each reaction tube.The concentration of target DNA was optimized to ensure the highest possible primer specificity. DNA was diluted serially for each reaction to determine the lowest concentration of polynucleotide that still yielded visible bands on EtBr-stained agarose gels; for pJOE105 this was # 1 ng of DNA.

PCR cycle parameters were examined to reduce the so called plateau effect which results in the non-specific amplification of background products. Taking this into account, cycling parameters were set to allow efficient amplification with the lowest number of cycles. Conditions were set at 33 cycles of 1 min. at 94 C for denaturation, 1 min. at 56.5 C for annealing, and 2 min. at 72 C for synthesis, followed by 10 min. at 72 C for extension.