Abstract—These instructions give you guidelines for preparing the memory for the defense of the Thesis of Master in Applied Materials Chemistry, preferentially in English. Define all symbols used in the abstract. Do not cite references in the abstract. Do not delete the blank line immediately above the abstract; it sets author box at its adequate position.

Index Terms—Write about four key words or phrases in alphabetical order, separated by commas.

I. INTRODUCTION

This document is a template for Microsoft Word versions 6.0 or later. If you are reading a paper version of this document, please download the electronic file, from http://www.ub.edu/estudis/mastersuniversitaris/quimicamateria ls so you can use it to prepare your manuscript.

Recommended length is 15 pages. Do not change the font sizes or line spacing to squeeze more text into a limited number of pages. Use italics for emphasis; do not underline.

To insert images in Word, position the cursor at the insertion point and either use Insert | Picture | From File or copy the image to the Windows clipboard and then Edit | Paste Special | Picture (with “Float over text” unchecked).

II. PROCEDURE FOR THESIS OF MASTER SUBMISSION

A. Documents delivering

Two weeks before the date of public presentation (the exact date will be announced) you will have to send by e-mail two copies of your manuscript: one in PDF format and one in editable format (MS Word preferred) to master.qma@ub.edu and to each member of your evaluation committee. The file should be named as follows: Authorsurname-Authorfirstname.pdf. An example of such a file name is: Perez-Maria.pdf. Additional information —if required, as software, presentations, ...— should be delivered in a CD that should be sent to the evaluation committee. The memory must state clearly the additional CD existence.

B. Additional paper copies

Additional paper copies are not needed. Remember, just a paper copy and additional CD deposited to the Secretaria d’estudiants (postgrau).

III. MATH

If you are using Word, use either the Microsoft Equation Editor or the MathType add-on (http://www.mathtype.com) for equations in your paper (Insert | Object | Create New | Microsoft Equation or MathType Equation). “Float over text” should not be selected.

IV. UNITS

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) Please, do not use English units. An exception is when English units are used as identifiers in trade, such as “3½ in disk drive.” Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

V. HELPFUL HINTS

A. Sections and subsections

Section headers will be numbered with Roman numerals with the paragraph centred. Subsections (if any) will be numbered with capital letters as in this template.

B. Figures and Tables

You must set the position figures and tables at the top and bottom of each column. Large figures and tables may span both columns. Place figure captions below the figures; place table titles above the tables. If your figure has two parts, include the labels “(a)” and “(b)” as part of the artwork. Please verify that the figures and tables you mention in the text actually exist. Use the abbreviation “Fig.” to refer to figures. Tables are numbered with Roman numerals.
Fig. 1. Magnetization as a function of applied field. Note that “Fig.” is abbreviated. There is a period after the figure number, followed by two spaces. It is good practice to explain the significance of the figure in the caption.

Use color if it is necessary for the proper interpretation of your figures.

Figure axis labels are often a source of confusion. Use words rather than symbols. As an example, write the quantity “Magnetization,” or “Magnetization M,” not just “M.” Put units in parentheses. Multipliers can be especially confusing. Write “Magnetization (kA/m)” or “Magnetization (10^3 A/m).” Do not write “Magnetization (A/m) × 1000”. Figure labels should be legible, approximately 8 to 12 point type.

An example for the formatting required for Tables is given in Table I.

C. References

Number citations consecutively in square brackets [1]. The sentence punctuation follows the brackets. Multiple references [2], [3] are each numbered with separate brackets [1]–[3]. When citing a section in a book, please give the relevant page numbers [2]. Do not use “Ref. [3]” or “reference [3]” except at the beginning of a sentence: “Reference [3] shows ...” Use the automatic endnotes in Word for generation of the reference list at the end of the paper using the “References” style. Number footnotes separately in superscripts (Insert | Footnote).

Place the actual footnote at the bottom of the column in which it is cited; do not put footnotes in the reference list (endnotes). Use letters for table footnotes (see Table I).

Give all authors’ names; do not use “et al.” unless there are six authors or more. Use a space after authors’ initials. Papers that have not been published should be cited as “unpublished” [4]. Papers that have been submitted for publication should be cited as “submitted for publication” [5]. Papers that have been accepted for publication, but not yet specified for an issue should be cited as “to be published” [6].

D. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have already been defined in the abstract. Abbreviations that incorporate periods should not be used in the text, even after they have already been defined in the abstract.

The following abbreviations are frequently used:
- C.G.S. (centimeter-gram-second)
- G.C.S. (Gaussian-C.G.S.)
- H.C.S. (Hertzian-C.G.S.)
- K.G.S. (Kerr-G.C.S.)
- M.C.S. (McKee-C.G.S.)
- P.C.S. (P methyl-C.G.S.)
- S.C.S. (Sprott-C.G.S.)

E. Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin, as in (1). First use the equation editor to create the equation. Then select the “Equation” mark-up style. Press the tab key and write the equation number in parentheses. To make your equations more compact, you may use the solidus (/), the exp function, or appropriate exponents. Use parentheses to avoid ambiguities in denominators. Punctuate equations when they are part of a sentence, as in

\[ \int_{0}^{\infty} F(r, \varphi) \, dr \, d\varphi = [\sigma \sqrt{2} / (2 \mu_{0})] \cdot \int_{0}^{\infty} \exp(-\lambda |z_j - z_i|) \, \lambda^{-1} J_{1}(\lambda r_j) \, J_{0}(\lambda r_i) \, d\lambda. \]  

Be sure that the symbols in your equation have been defined before the equation appears or immediately following. An excellent style manual and source of information for science
VI. ORAL PRESENTATION

The oral session will be limited to 20 min for author presentation and 20 min for work discussion.

VII. EVALUATION CRITERION

The work will be evaluated according to the following items: i) Report of the Master’s Thesis Supervisor (20%); ii) Quality of the written report (40%); iii) Oral presentation (20%) and iv) Discussion with the members of the evaluation commission (20%).

VIII. EVALUATION COMMISSION

The evaluation commission will be composed by three members appointed by the Master’s commission.

IX. CONCLUSION

A conclusion section is required. Although a conclusion may review the main points of the paper, do not replicate the abstract as the conclusion. A conclusion might elaborate on the importance of the work or suggest applications and extensions.

ACKNOWLEDGMENT

Appendixes, if needed, appear before the acknowledgment.

REFERENCES