

# **INFRAESTRUCTURA VIAL JOURNAL UNIVERSITY OF COSTA RICA**

## **GUIDELINES FOR THE PREPARATION OF SCIENTIFIC ARTICLES**

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### **SUMMARY**

The abstract should not exceed 300 words, should be self-contained and should not require reference to the article to be understood. The abstract should present the objectives and scope of the study, or the motivation for writing the article, the methodology should be described only to the extent necessary for understanding, and the conclusions should be presented in a concise and informative manner. The abstract should not contain undefined terms or acronyms, references, equations or lists.

**KEYWORDS:** It is necessary to present at least 4 keywords that help identifying the article in an archival system.

### **ABSTRACT**

Following the summary in Spanish, the same should be written in English. Do not exceed 300 words.

**KEYWORDS:** 4 keywords in English that identify the article should be presented.

### **GENERAL INSTRUCTIONS**

The present document serves as a template for scientific papers. Authors are free to create their own layouts according to the format provided. Types of articles valid for publication:

- Original research or studies.
- Cases of application of new technologies.
- Opinion articles.

It should be noted that the papers must be related to the field of road infrastructure, transportation engineering and related subjects.

Specifications on the paper title:

- The title should be representative of the content of the article.
- The maximum length will be 85 characters.
- Must be submitted in Spanish and English.
- Arial font, 14 pt, all caps and bold.

Research articles must include: introduction, objectives, methodology, development, analysis of results and conclusions.

Papers should be written in Spanish or English using the MS Word® processor, and using The International System of Units (SI).

### **Page Format**

Letter size paper (21.59 cm x 27.94 cm), with the four margins equal to 2.5 centimeters.

### **Length**

The maximum length of the article is 12 pages, including tables, figures and references.

### **Text**

Text specifications:

- Font Arial, 11 pt.
- Justified type alignment for all text.
- Single space (1.0 pt) between lines.
- After a title and between paragraphs leave a space (a single line).
- All titles should be typed in Arial, 11 pt, left aligned.

In addition, titles should be typeset according to the following styles:

### **TITLES IN FIRST ORDER**

(All capitalized, bold, on a separate line)

### **Second Order Titles**

(Capital letters in each word, bold, on a separate line)

### *Third Order Titles*

(Capital letters in each word, italics, on a separate line)

### **Fourth Order Titles**

(Capital letter in each word, bold, on the same line as the text)

### **Tables**

The titles of the tables should be placed centered above the tables. Tables should be numbered correlatively to their appearance in the text, with the following format: first, the word "Table", then the number and period (Arial, bold, 11 pt). Then the description in normal text (Arial, 11 pt). When referencing them within the text, the first letter should be capitalized (Table 1). If the table is not original (prepared from data sources that do not belong to the authors) the source should be referenced in parentheses.

**Table 1.** Example of a table

<b>Data 1</b>	<b>Data 2</b>	<b>Data 3</b>
A	D	G
B	E	H
C	F	I

### **Figures**

When articles are submitted for review, figures may be submitted inserted in the text. If the article is accepted for publication, the figures should be submitted later as separate files, in image format (.JPG, .PNG) with a minimum resolution of 300 dpi and a size of no less than 10 cm.

The titles of the Figures should be placed centered below them. Figures should be numbered correlatively to their appearance in the text, with the following format: first, the word "Figure", then the number and period (Arial, bold, 11 pt). Then the description in normal text (Arial, 11 pt). When referencing them within the text, the first letter should be capitalized (Figure 1). If the figure is not original (prepared from data sources that do not belong to the authors) the source should be referenced in parentheses.



**Figure 1.** Example of a figure

## Equations

For the equations, using the Equation Editor application included in the Microsoft Office® software package is recommended. The equations that appear in the text will be numbered in sequential order, indicating their number to the right of the equations and in parentheses. All variables should be defined, either within the text or in a list displayed after the equation. Example:

$$N_f = k_1 \left( \frac{1}{\epsilon_t} \right)^{k_2} \quad (1)$$

where

$N_f$  = number of repetitions at failure

$\epsilon_t$  = applied unit strain

$k_1, k_2$  = experimentally obtained regression coefficients

## CONCLUSIONS

Conclusions may be written within a paragraph or using bullet points.

## ACKNOWLEDGMENTS

If necessary, indicate acknowledgements (e.g., help, collaborations). These should be placed with a first order title "ACKNOWLEDGEMENTS" immediately before the section destined to References.

## REFERENCES

References should be included in the text, indicating the author's last name (without initials) and the date of publication in parentheses, as per APA 6th edition.

The complete list of references should be at the end of the paper ordered alphabetically by the last name of the first author and chronologically (first the most recent publication and annotated with index a, b, c, etc. next to the year of publication if it is repeated as well as referenced within the text). A 6-point line spacing should be left between each entry. The format of the list of references must comply with the APA 6th edition standard. The identifier number (DOI) should be included for each publication that has it.