UNIVERSIDAD DISTRITAL
FRANCISCO JOSÉ DE CALDAS

UNIVERSIDAD DISTRITAL

FACULTAD DE INGENIERIA
SYLLABUS

Maestría en Ingeniería Industrial

-Inteligencia Computacional para los Negocios

ESPACIO ACADÉMICO (*ASIGNATURA*): Essentials of Scientific Communication for Engineers							
Código del espacio académico:							
Obligatorio		Básico		Complementario			
Electivo		Intrínseco		Extrínseco			
Fecha última actualización	Febrero 2021	Grupo:					
Número de créditos:	4						
TIPO DE CURSO							
Teórico		Práctico		Teórico-Práctico	X	Virtual	
ALTERNATIVAS METODOLÓGICAS							
Clase magistral		Seminario		Seminario-Taller			
Taller		Prácticas		Proyectos tutorados			
Otro:							
HORARIO							
Día	Horas	Salón					
JUSTIFICACIÓN ESPACIO ACADÉMICO							

The course comprises topics related to writing and submitting manuscripts, organising bibliographic sources, designing tables and figures, preparing oral and poster presentations, understanding the peer—review and publishing process, recognising the utility of scientometrics and research Impact. All these scenarios would be presented highlighting the importance of observing scientific ethics and etiquette whilst taking advantage of well—known tools for research communication such as LATEX and collaborative platforms for scientific edition.

Thus, this course will provide students with a basic toolbox for writing reports, papers, presentations and other forms of scientific communication during their graduate studies.

PREVIOUS KNOWLEDGE:
- ***Scientific method***
- ***Statistics***
- ***R***

PROGRAMACIÓN DE CONTENIDO

OBJETIVO GENERAL

To guide graduate students through the different scenarios of modern scientific communication, focusing on providing practical advice to improve skills needed to appropriately communicate their research results and to achieve publishing success.

OBJETIVOS ESPECÍFICOS

- *Identify elements and scenarios of scientific communication and how they differ from other informal communication contexts.*
- *Be able to interpret, organise, structure and draft a scientific manuscript.*
- *Familiarise with tools for bibliography managing.*
- *Understand basic scientometric and impact factor measures.*
- *Acquire ErEX skills to produce stylish scientific reports and presentations.*
- *Be acquainted with the code of good conduct in scientific publication.*
- *Be aware of the peer-review process and the "publish or perish" myth.*
- *Collaborate with fellow students to exercise written and oral communication cases.*
- *Realise how relevant good scientific communication skills are in following a research careen*

COMPETENCIAS DE FORMACIÓN

Scientific communication skills

- Ability to write papers reflecting your scientific thinking and results and provide a long-lasting body of knowledge to build upon new research.
- Design oral presentations to let research known to the community.
- Maintain discussions as to exchange ideas and points of view.
- Prepare letters (email), résumés, research proposals, talks for nonspecialist audiences, etc.

PROGRAMA (UNIDADES TEMÁTICAS Y CONTENIDO DETALLADO)

→ Communicating science in the digital era
- Finding, tracking, consuming and publishing scientific literature.
- Tools for scientific edition: LATEX, bibliographic databases and managers.

→ Writing scientific papers
- Structuring and drafting the paper.
- The ethics of scientific publication.

→ Publishing scientific papers
- Deciding publication venue: scientometrics, bibliometrics and visibility.
- The peer—review process.
- Publication business models.

→ Beyond papers: communicating in academic events.
- Preparing oral talks.
- Participating in poster sessions.

ESTRATEGIAS
Lectures 20% Lab Demonstrations 20% Collaborative discussions 10% Autonomous coursework 50%
RECURSOS

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Lecture notes, Sergio A. Rojas, PhD.

email: srojas@udistrital.edu.co

Text book: Doumont, J., ed. English Communication for Scientists, Cambridge, MA: NPG Education, 2014.

Websites and other resources:

An Interactive Introduction to LaTeX
https://www.overleaf.com/latex/learn/free-online-introduction-to-latex-part-1.pdf

Fun with Beamer
http://web.mit.edu/rsi/www/pdfs/beamer-tutorial.pdf

Beamer by example
https://www.tug.org/TUGboat/tb26-1/mertz.pdf

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https://revistas.udistrital.edu.co/index.php/reving

BIBLIOGRAFÍA

- Doumont, J., ed. English Communication for Scientists, Cambridge, MA: NPG Education, 2014.
- Touretzky, D. Ethics and Etiquette in Scientific Research, Carnegie Mellan University, 2007.
- Rojas, S. A. Editor's notes, Revista Ingeniería, Universidad Distrital, 2013-2018.
- Booth, W., Colomb, G. et al. The Craft of Research, University of Chicago Press, 4M edition, 2016.
- Avila, F. Como se Escribe, Norma, 2003.
- Lamport, LATEX: A document preparation system, Addison Wesiey, 2nd edition, 1994.

REVISTAS

Revista Ingenieria, Facultad de Ingeniería, Universidad Distrital Francisco José de Caldas

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DIRECCIONES DE INTERNET
An Interactive Introduction to LaTeX https://www.overleaf.com/latex/learn/free-online-introduction-to-latex-part-1.pdf Fun with Beamer http://web.mit.edu/rsi/www/pdfs/beamer-tutorial.pdf Beamer by example https://www.tug.org/TUGboat/tb26-1/mertz.pdf Revista Ingenieria, Facultad de Ingeniería, Universidad Distrital https://revistas.udistrital.edu.co/index.php/reving
ORGANIZACIÓN/TIEMPOS
EVALUACIÓN

	TIPO DE EVALUACIÓN	FECHA	PORCENTAJE
PRIMER CORTE	Half-term short assignments Oral presentation		(20%) (15%)
SEGUNDO CORTE	Full-term short assignments Poster		(20%) (10%)
EXAMÉN FINAL	Written paper		(30%)

ASPECTOS A EVALUAR DEL CURSO

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