TOOLS FOR SCIENCE COMMUNICATION: A PERSPECTIVE FROM THE NATURAL SCIENCES

Objectives:

- Develop discursive strategies to effectively communicate our research and counter denialism and misinformation.
- Apply narrative tools and AI to develop science communication products.
- Produce a popular science piece suitable for publication in mass media.

Instructor: Dr. Damián A. Fernández

Academic Coordinator: Dr. Magdalena Llorens

Collaborator: Dr. Pablo D. Cabanillas

Dates: August 24 – September 7, 2026

- Five asynchronous 1-hour online sessions: Prior to August 31
- Five synchronous 1-hour online sessions for discussion, feedback, and Q&A: August 31 – September 4
- One in-person 5-hour session: September 7

Workload: 30 hours

Language: Spanish

Academic Accreditation: This graduate course is endorsed by the National University of Patagonia San Juan Bosco (Resolution CDFCNyCS No. 1076/2026).

Venue: National University of Patagonia San Juan Bosco, Trelew Campus (Chubut, Argentina).

Target Audience: Any science practitioner, researcher, or enthusiast who wants to share their knowledge more effectively, regardless of prior experience in communication.

Eligibility: Applicants must be advanced undergraduate students or graduates in scientific fields, communication, or related disciplines.

> *Note*: Registration to the 19th Argentine Symposium on Paleobotany and Palynology and the 58th Annual Meeting of AASP–The Palynological Society is not required to participate in this course.

Course Fees:

- Graduate Student Fee: $30,000 ARS (USD 20 for participants from foreign institutions).
- Undergraduate Student Fee: $15,000 ARS (USD 10 for participants from foreign institutions).

Registration Deadline: August 22, 2026

Information and Registration: fdamianandres@gmail.com (Damián A. Fernández)

Evaluation and Completion Requirements: 80% attendance and submission of a final written project.

Syllabus:

Unit 1: Fundamentals and Theoretical Framework

- Definitions and Scope: Conceptual framework of public communication of science (PCS). Distinctions between popularization, institutional dissemination, science journalism, and community outreach.
- Communication Models: Moving from the cognitive deficit model to civic participation and dialogue. The role of scientists in the public sphere.

Unit 2: Context and Social Perception

- Sources and Channels: Mapping traditional media and digital platforms. Newsworthiness criteria and topic selection.
- Contemporary Challenges: Analyzing 21st-century denialism and misinformation. Communication strategies to foster critical thinking and scientific literacy.

Unit 3: Rhetoric and Discursive Strategies

- Scientific Narrative: Adapting tone, register, and pedagogical transposition based on the target audience.
- Discursive Resources: Metaphors, analogies, and the strategic use of humor. Structuring clear, memorable messages without sacrificing academic rigor.

Unit 4: Applied Tools and Production

- Tools Workshop: Oral presentation techniques, voice modulation, and body language. Leveraging visual resources and social media to share research outcomes. Integrating AI tools for text, image, and audio generation.
- Writing Lab: Guidelines for drafting science communication content (op-eds, social media threads, or scripts). The editing and review process for science communication products.