

## TOPIC FOR COMPETITION OF STUDENT INVOLVEMENT IN SCIENTIFIC ACTIVITIES

Title of the topic: Media Dopamine Loops: How Communication Technologies Shape Creative Cognition

Aim of research activities: To investigate how media environments and communication technologies influence creative thinking through reward-based feedback mechanisms, analyzing how “clip thinking,” instant gratification, and attention fragmentation impact creative depth and innovation capacity.

Short description of the topic (up to 2000 characters):

This research examines how digital communication systems, designed to maximize engagement through dopaminergic feedback, reshape our creative cognition. Drawing on Marshall McLuhan’s idea that “the medium is the message,” Nicholas Carr’s *The Shallows*, Cal Newport’s *Deep Work*, and Anna Lembke’s *Dopamine Nation*, the study explores how social media platforms, notification systems, and short-form content create fragmented modes of perception.

The research will map how such *media dopamine loops* alter attention spans, creative patience, and the sense of intrinsic motivation (Deci & Ryan), fostering a culture of shallow innovation and reactive creativity. Through a literature-based diagnostic analysis, the student will identify how communication design amplifies distraction and short-term feedback cycles, reducing the cognitive and emotional space required for insight and flow.

By synthesizing findings from media studies, cognitive psychology, and creativity theory, the study will reveal how technological communication patterns both enable and undermine creative potential — offering a conceptual framework for understanding the cost of “cheap dopamine” in the age of information overload.

Supervisor of the topic: Tomas Jonusas