

RESEARCH COMPENDIUM

Colegio de San Iuan de Letran Calamba ACADEMIC YEAR 2022-2023





Colegio de San Juan de Letran Calamba

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ACADEMIC YEAR 2022-2023

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Research Department

FOREWORD

This journal proudly presents the research studies of the graduating students from various programs at Colegio de San Juan de Letran Calamba. These projects represent the culmination of their academic journey as student-researchers.

The Business, Management, and Accountancy section features research from both Human Resource Management and Marketing Management students. The HRM studies explored crucial topics such as the challenges of on-the-job training during a pandemic, perceived competencies in virtual internships, job satisfaction in different work arrangements, and employee satisfaction with incentive programs. The Marketing Management feasibility studies, on the other hand, demonstrated an entrepreneurial spirit, covering diverse ventures from eco-friendly food stalls and nutritious meal options to unique cafes, organic products, plantable lip crayons, K-Pop themed restaurants, digital marketing services, and even agricultural hydroponic crops.

The School of Computer Studies and Technology projects delved into cutting-edge topics in Computer Science and Information Technology. Computer Science students explored facial recognition and eye tracking for online learning, simulated road systems for autonomous cars, hate speech classification using AI, waste management with deep learning, and pill identification for the visually impaired. Information Technology students presented web-based systems for surveillance installation, barangay document requisition, barangay management with analytics, automated queuing, security service patrols, time series forecasting for agriculture, decision support systems for poultry farming, internship monitoring, and emergency reporting. The Entertainment and Multimedia Computing projects showcased the creation of animated films portraying Letran alumni values and the challenges faced by educators during online classes.

The School of Education, Arts, and Sciences features research from the BA Communication program, focusing on the perceived efficacy of pandemic information dissemination on Facebook and the development of educational materials on anti-domestic physical abuse.

The School of Engineering and Architecture showcases the ingenuity of its students through various projects from Computer, Industrial, Mechanical Engineering. Computer Engineering students developed a smart parcel vault with UV sanitization. Industrial Engineering students explored the feasibility of eco-friendly products like pencils made from coconut coir, bamboo mice, reversible drinkware, rice straw wraps, ergonomic laptop tables, anti-radiation screen protectors, multi-functional pens, adjustable wooden chairs, benches for the elderly, starch-based bubble wrap, ergonomic work desks, biodegradable face masks, adult chair pillows, school armchairs, pump bottle

dispensers, car headrest pillows, and more. Mechanical Engineering students tackled real-world challenges through designs and improvements in water source systems, vacuum systems, ventilation, power backup, compressors, chip filtration, water supply, waste dryers, diamond wheel saws, solar generators, heat extraction, juicer machines, air distribution, biodiesel recovery, crate lifting machines, noise pollution control, and more.

The School of Tourism and Hospitality Management research explores timely issues in the tourism industry. Studies covered community-based tourism, challenges faced by travel agencies during the pandemic, the impact of changing guidelines on resorts, the effectiveness of tourism projects, motivational factors and challenges of ecotourism destinations, community disaster preparedness, heritage tourism management, the effects of COVID-19 on tourist preferences, and sustainable ecotourism practices.

This diverse collection of research and feasibility studies reflects the hard work, dedication, and innovation of Letran Calamba student researchers. These projects offer valuable contributions to their respective fields and demonstrate the students' readiness to embark on successful professional careers.

Arriba, Letran!

Ms. Magnolia R. QuiatchonDirector
Research Department

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