

Academic

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cations, and English as a second language (ESL). And the student will have spent considerable time in chemistry, microbiology, and biotechnology laboratories, learning the latest scientific procedures and techniques, which are increasingly important to agriculturalists, food technologists, and environmental engineers the world over. During their years on campus, Zamorano students also gain core competencies in each of the university's areas of specialization. By graduation, Zamoranos understand how to run a seed and grain plant that sorts, processes, and stores wheat as well as how to build a geographic information system model to predict human impacts on a tract of protected rainforest. They know how to care for and build a productive herd of dairy cows as readily as they can balance the operating budget of a fresh-produce export firm.

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Senior THESIS Projects:

Needed RESEARCH, original IDEAS







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These projects also often seek to improve the lives of Latin Americans, including Hondurans who live in proximity to Zamorano. In 2009 the neighboring municipality of San Antonio de Oriente asked Zamorano for help in developing an effective sanitary landfill, something the district has never had. Carlos Quiroz, who directs Eco-Zamorano, the university's program that seeks to reduce and recycle campus waste, supervised two theses that students developed to address this need.

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- To develop a hydrological model to show the relationship between precipitation and the local water table, Miriam Arrueta (Bolivia, 2009) of the Socioeconomic Development and Environmental Science (DSEA) major, examined and documented rainfall, evaporation, water flow rates and spillage from water sources (small streams), as well as human consumption patterns, in a watershed area near Zamorano known as El Gallo. Using equipment and procedures developed by the U.S. Geological Survey, Arueta succeeded in creating a tool Zamorano and others can use to better predict water availability in the area.
- As Agribusiness Management (AGN) majors, Juan Carlos Brito (Ecuador, 2009) and Erick Corado (Guatemala, 2009) developed a color key card to use as a diagnostic instrument to determine the optimal amount of nitrogen to use to fertilize corn. While it sounds simple, an effective tool for use by farmers in the field had never been developed before, and as fertilizer is usually the greatest expense incurred by small farmers, the tool reduces costs (as well as the waste and environmental contamination caused by unneeded nitrogen applications). The key card is currently being reviewed for patent protection, and with Zamorano's help Brito and Corado are seeking funding to distribute the tool in rural areas of Central America.
- Carlos Moreno (Ecuador, 2009), a major in Food Science and Technology (AGI), studied Dulcamara (Solanum dulcamara L.) for his thesis and evaluated ways to blend the supplement into chocolate. Dulcamara, a plant valued for its ability to boost the human immune system, is marketed regionally as a dietary supplement. Moreno identified the physical, chemical, and sensorial qualities of the enhanced chocolate and evaluated both powder and liquid forms to identify the most effective way to combine dulcamara with sweetened cocoa to create a candy bar. Regional industry has expressed interest in pursuing further research to incorporate this supplement into chocolate and other food stuffs.

Throughout the year, the Zamorano campus is a lively place where students and faculty alike have opportunities for cultural and intellectual enrichment outside of the classroom. Zamorano hosts a number of conferences and seminars, with special guests who provide the university community with on-campus lectures and scientific demonstrations. Annual special events include the highly popular Zamorano Fair, the Pan-American Festival, and a performance by the Honduran Symphony.

Productos agrícolas y artesanias se exponen en V Feria Zamorana.

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During the inauguration of the 5th Zamorano Fair, Jorge Bueso, Honduran businessman, said "We strengthen the work of this institution. We have provided support with many scholarship for students from the western area of Honduras".

El Heraldo September 23, 2009

Right: Guatemalan students perform a traditional dance during the fifth edition of the Zamorano Fair. Last year, more than 9,000 people attended the event.





Special EVENTS

Faculty and staff also help students organize events that provide special educational opportunities.



In November, the Food Science and Technology department (AGI) sponsored a New Products Fair, during which students presented original product ideas.

FAIRS AND FIELD TRIPS

he English as a Second Language program sponsors several such days when students prepare exhibits and presentations around a particular theme, including the American Indian fair, a Diorama fair, and an English language fair and spelling bee. Each of Zamorano's academic disciplines also sponsors days related to their area of

concentration. For example, on Earth Day the Socioeconomic Development and Environmental Science (DSEA) department organizes a morning of educational games, quizzes, and contests related to the environment and the natural world.

In addition to day trips to Tegucigalpa and around the Valley de Yeguare region, longer excursions are programmed for third and fourth year students. For example, Agribusiness Management (AGN) seniors traveled to Miami, Florida for five days in November. Students visited companies working at every stage in the value chain, including a farm, a packaging plant, a wholesale broker, shippers, a customs agency, and supermarkets. Of particular interest was a visit behind the scenes at a Whole Foods Market, where senior managers discussed their jobs and the issues arising around obtaining and marketing different classes and types of products.



As part of the new coastal studies management course, DSEA students journeyed to the Bay island of Utila and joined instructors from the Utila Center for Marine Ecology (UCME) for a Learning-by-Doing practicum. For six days the students participated in a variety of marine activities and engaged in experiments and field research developed to give them a practical knowledge and understanding of marine ecology and coastal zone management. Students learned how to snorkel (some learned how to swim!), map underwater terrain, identify and inventory species, recognize and identify the impacts of temperature, wind, waves, and weather on various micro habitats, and also how to identify and predict impacts from changes brought about by human activities, including fishing, pollution, tourism, and development.





As an institution, we constantly strive to improve our methodologies and services to better teach and nurture our students. In the past year we made several changes and improvements to our curriculum, processes, and infrastructure.

Nevelopments

First, we are pleased to report that the percentage of women in the student body continues to grow. Zamorano had record numbers of female applicants in the past year, and women represent 41 percent of the class of 2013. Zamorano remains committed to providing educational opportunities to deserving Latin Americans, both men and women, and hopes to approach parity within the next decade.

The curriculum was revised so that students would have more elective courses and could participate in a greater variety of Learning-by-Doing practicums. Two agribusiness courses also were added to provide a stronger foundation to first- and second-year students in financial management.

Dr. Raul Zelaya was appointed director of the Office of Institutional Effectiveness. In addition to guiding Zamorano through the application process for accreditation by the Southern Association of Colleges and Schools (SACS), his office provides guidance to

departments throughout campus in the standardization of information management and the creation of procedures manuals, all of which helps to improve collaboration and information sharing around the university. Architect Mario León Gómez and his team completed construction of a new dormitory during the past year. Located adjacent to the Simón Malo Memorial Arboretum, the new dormitory has 25 double rooms, providing housing for an additional 50 students. Work continues apace on two additional dormitories in the same location.

Zamorano also completed construction of a new Microbiology Lab for Food Science and Technology studies and refurbished the school store, to provide more space for goods and offices for management. Zamorano renovated the gymnasium to create a more comfortable and modern environment, including separate exercise rooms for men and women and weight training equipment customized for each gender.



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