NEWSLETTER

NHA TRANG UNIVERSITY

1ST QUARTER, 2020

Covid-19

ONLINE LEARNING

NTU
ĐẠI HỌC NHA TRANG
1959

Mission

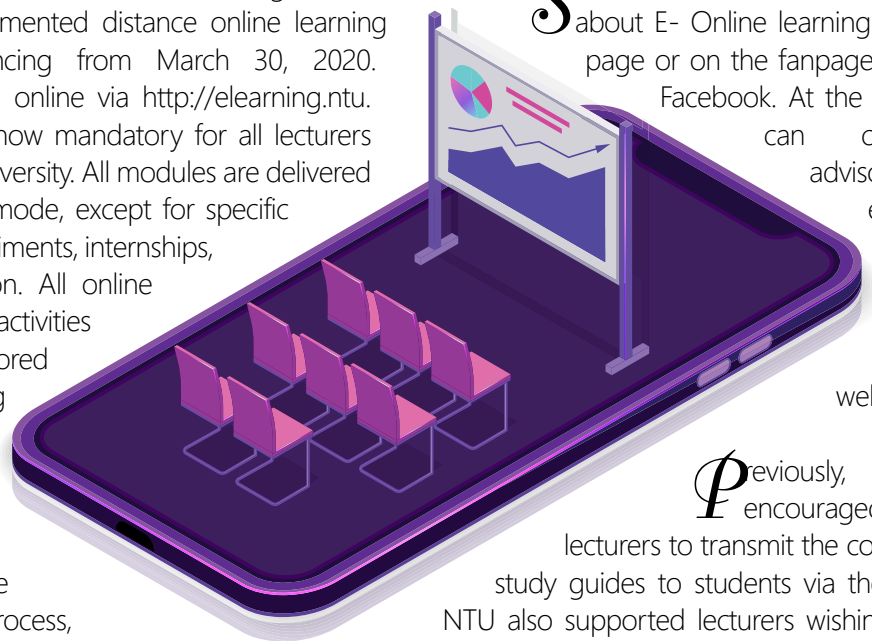
To train highly qualified manpower, carry out research and technology transfer, and provide services in various areas to meet the demand of socio-economic development, with fisheries as the major strength.

Vision

To become a prestigious university in training, research, and technology transfer, a leader in Southeast Asia in fisheries science and some selected areas in marine economy by 2030.

IMPLEMENTATION OF ONLINE LEARNING *due to Covid-19*

In the challenging environment surrounding Covid-19, NTU officially implemented distance online learning (E-learning), commencing from March 30, 2020. Teaching and learning online via http://elearning.ntu.edu.vn and Zoom is now mandatory for all lecturers and students of the university. All modules are delivered via E-learning online mode, except for specific modules such as experiments, internships, and physical education. All online teaching and learning activities are carried out and stored on the NTU E-learning system and Zoom. Accordingly, the university has also designed methods to assess and monitor the E-learning online process, ensuring convenience and effectiveness.



Students can follow and update information about E- Online learning plans on the home page or on the fanpage of the university on Facebook. At the same time, students can contact academic advisors and lecturers via email, phone and social networks ... to undertake E-learningonline learning activities well.

Previously, the university encouraged and instructed lecturers to transmit the content of lectures and study guides to students via the E-learning system. NTU also supported lecturers wishing to use projectors, TVs, chalkboards and cameras to film lectures, as well as to organize training courses on using E-learning and Zoom for lecturers.

IMPLEMENTING STRINGENT MEASURES TO PREVENT COVID 19 PANDEMIC

Due to the complicated situation of the Covid 19 pandemic in Vietnam and the world, NTU has adjusted its timeline for the academic year, and use an E-learning system and Zoom for learning instead of face-to-face meetings..

In addition, the university has been applying many measures on campus to prevent the spread of the disease such as checking body temperatures of those entering the university, conducting epidemiological surveys, obligatorily wearing face masks in the campus, recommending students washing hands frequently, and maintaining hygiene. It has also conducted thorough cleaning, disinfecting the entire university, lecture buildings and dormitories in accordance with the Ministry of Health's instructions.

The university is also focused on propaganda activities, directed towardslecturers and students in relation to information and measures to prevent and control Covid-19 transmission. At the same time, NTU has arranged security forces to control visitors' entry and exit onto the campus to ensure a safe environment.

Application of technology in tuna fishing

Facing a situation of declining tuna quality, due to traditional fishing, lack of technology in exploitation, as well as preliminary processing and preserving, researchers of NTU have conducted a research project titled "Technology in tuna fishing (fishing and preserving)", establishing processes and developing equipment for fishing and preserving products that suit local tuna fishing vessels.

The research group's experimental vessel was compared with another ship using traditional methods of fishing and preservation. Over three fishing trips (15 days for each trip), the total output of ocean tuna caught by the experimental vessel was 1.13 times higher than that of the control vessel; the number of fish lost due to broken fishing lines was only 1/3 compared to the control vessel, fish having good quality (based on an evaluation by experienced experts) was also 4.2 times higher. Total investment for the vessel was approximately VND 200 - 300 million/vessel.

Khanh Hoa Province's Council of Science and Technology appreciated greatly the result of the project. It will help the management agencies to set up fisheries development policies effectively and efficiently. At the same time, it is a basis for the application of technology to effectively fish and preserve products in local fisheries; increase fishing productivity; improve quality and value of products; and improve the fishing efficiency of fishermen.

INACTIVATED VACCINE FOR PREVENTING BLINDNESS IN COBIA

Blindness triggered by Streptococcus iniae (chain-shaped spherical bacteria) causes death in commercial cobia and many other local species. Treatment using antibiotics is increasingly less effective due to the emergence of many antibiotic resistance bacteria. On that basis, a research team led by Dr. Tran Vi Hich, Research Center of Aquatic Animal Health and Breeding Studies, NTU, evaluated the protective effectiveness of inactivated vaccines in preventing blindness caused by *Streptococcus iniae* in cobia.

From 40 uninfected cobias, of which 20 were vaccinated, 20 were injected with a physiological saline solution. The results of the study showed that the trial vaccine was completely safe for cobia, with no abnormal signs found in the vaccinated fish. The survival rate of the fish after 30 days of being given the vaccination was 100% and the growth rate of the fish was similar to the unvaccinated fish. In addition, 100% of the serum of the vaccinated fish had specific antibodies against *Streptococcus iniae*, while in the unvaccinated group of fish, 90% of the serum did not have antibodies against *Streptococcus iniae*.

Inactivated vaccine has the effect of protecting cobia against blindness caused by *Streptococcus iniae* with a protection factor of 85.19%. In fact, at present, most vaccines used in aquaculture are primarily imported from foreign countries. The research on *Streptococcus iniae* is the basis for further studies to complete the production process of the vaccine for preventing blindness caused by streptococcus bacteria in cobia. In the immediate future, the research results of will be used by the Research Center of Aquatic Animal Health and Breeding Studies to produce disease-resistant cobia fingerlings for local farmers.

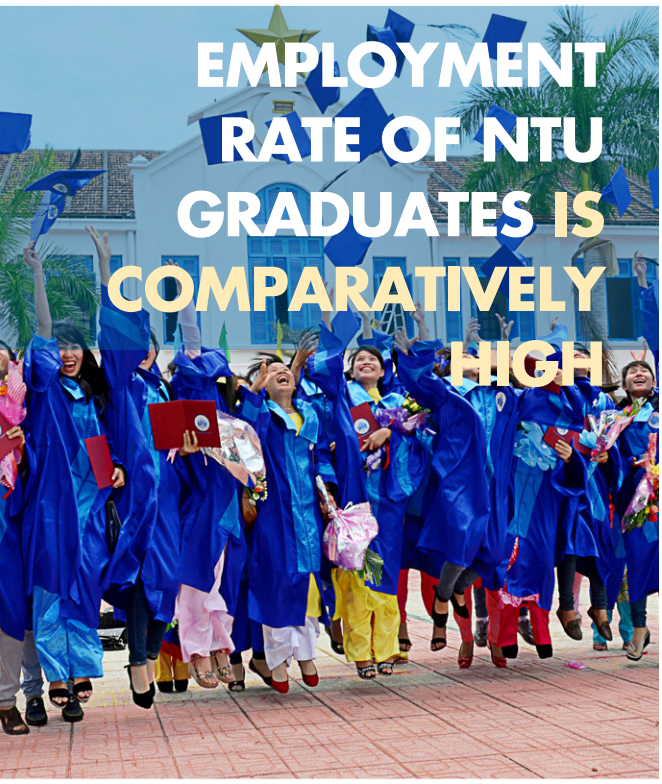
DEVELOP NEW PARTNERSHIPS

In the cooperation agreements signed with organizations and businesses, NTU and the partners agreed to work closely together and to cooperate in training and scientific research. Specifically, NTU will coordinate with partners to implement practice and internship programs, professional training courses; contribute to updating undergraduate programs, provide visiting lecturers and help assess students' results during training processes and prioritize recruiting students of the university. In terms of scientific research, the parties will collaborate on joint research activities, use common research results, organize conferences and exchange expertise.

In the first quarter of 2020, NTU signed cooperation agreements with partners: Vietnam Association of Certified Public Accountants (VACPA) (December 26, 2019); 5 tourism businesses: Nurshing home 20 Nha Trang; Lan Anh Company Limited - DQua Hotel; Queen Ann Company Limited; Muong Thanh Luxury Nha Trang Hotel; Sealife Group Co., Ltd (January 9, 2020); Van Phat Dat Investment Group Joint Stock Company (March 10, 2020), as well as holding meetings with Kodolanyi Janos University (Hungary) (February 29, 2020) and Ninh Thuan Vocational College (March 5, 2020) to discuss on cooperation.

In discussing cooperation orientation with Kodolanyi Janos University (Hungary), the university's leaders agreed on a focus on the fields of economy, tourism and IT and consider developing double-degree programs as well as programs on culture and language.

During a meeting with Ninh Thuan Vocational College, NTU agreed to facilitate college students to continue study in undergraduate and graduate programs in foreign languages at NTU and cooperating to improve the quality of the program in Tourism. Especially, allowing students from the Faculty of Electrical and Electronics, NTU to have apprenticeship at Ninh Thuan Vocational College which is equipped with modern equipment sponsored by German partners.



More than 85% of the surveyed graduates obtained employemnt after graduation - this is the average figure published by NTU after the university's survey of employment of 1761 graduates within 12 months (from August 2018 – August 2019). The survey was conducted by questionnaires, directly, via email and by phone.

Notably, high employment rates (> 90%) belong to programs such as ***Aquaculture (100%), Ship Engineering (over 96%), Fishing Technology (over 95%), Mechatronics Engineering Technology (over 94%), Seafood processing technology (over 93%), Banking and Finance (over 93%), Accounting (92%).***

The figures show that programs in fisheries have a very high percentage of students obtaining employment after graduation. This reflects the need for high quality human resources in the fisheries industry, while also reflecting positive results from the university's innovation in training, strengthening cooperation with businesses, facilitating students to approach real activities in their chosen career, commencingin their first year and throughout studying process and supporting students to improve their soft skills as well as encourage them to participate in entrepreneurship.

UPDATING UNDERGRADUATE PROGRAMS

According to the academic year plan, to increase the contribution of agencies and organizations outside the University to complete the university-level training programs, Nha Trang University has organized a number of consultation sessions. Participants were consulted from diverse groups - companies - businesses, state management agencies, research agencies, lecturers and alumni. At present, 28 programs have been conducted to collect comments and data.

Some issues were tabled such as: minimizing modules for basic knowledge subjects; increasing the time for career practice and field trip to businesses; updating the domestic socio-economic fluctuations in the program, strengthening training in computer skills (professional and office software), foreign languages skills, communication skills and job handling skills. In addition, businesses also emphasized that students need to improve their physical strength, attitude, behavior, initiative and passion for work.

TRAINING COURSE *on* "DESIGN AND USE RUBRICS IN EVALUATION"

More than 100 NTU officials and lecturers participated in the training course "Design and use Rubric in evaluation" on 13 January, 2020.

The course offered theory and practice in groups, providing lecturers and staff with skills to determine evaluation methods in accordance with output standards; design Rubrics corresponding to output standards and design tests corresponding to the determined Rubrics and output standards. The participants also learned how to build and review output standards towards advanced orientation.

Rubric is an assessment tool that specifies the criteria achieved on all student tasks, from written tasks to oral tasks and visual tasks. This tool is used for grading learning progress and final assessments. There are two types of assessment: overall and detailed assessment. In particular, the overall evaluation is grouping different evaluation criteria according to a theme or level achieved, while the detailed evaluation is distinguishing different evaluation criteria and solving them holistically.

INCREASE COMMUNITY ENGAGEMENT AND SERVICE

for sustainable development

NTU has further developed the university's community services into a policy in order to identify goals, principles and solutions and to implement this mission more effectively within the capabilities and resources of the university.

Solutions were proposed such as increasing exchange and knowledge sharing, allowing the community to access the University's facilities, strengthening training and scientific research activities with the community, and constantly improving to make the university become a typical collective in the community. In addition, there will be a policy of commendation and recognition of achievements for collectives, officials and learners participating in community services activities.

In recent years, NTU staff have involved in social charitable activities and donations to support hunger eradication and poverty reduction programs and support for victims of natural disasters, fires and people in remote areas. The university's activities of culture, art, sports have received positive response and participation from the staff. Some highlights of NTU's community services can be mentioned such as co-organizing job fairs, supporting career counseling for high school students, and transfering technology to community., etc.

INNOVATION

In the time of Covid-19

Recently, lecturers and students from NTU successfully created an automatic hand sanitizer sprayer which has been installed on campus. The sprayer not only facilitates convenient hand washing, but also guarantees hygiene, avoiding direct touch, hence restricting the possibility of cross infection. This portable sprayer can be installed in different locations thanks to its rechargeable battery power source.

Previously"Seeds of Hope" – a group of young scientists from NTU and other high schools in Nha Trang has successfully developed an alcohol-based hand sanitizer, meeting WHO guidelines thus meeting the needs for disinfection for pupils at schools.

The group presented the ingredients and preparation method for the sanitizer to nearly 200 teachers teaching biology/chemistry in schools in Khanh Hoa province. The cost of producing this solution as compared to other sanitizer products is very economical. It enables schools to proactively control the transmission of Covid-19. "Seeds of Hope" and the teachers have produced 300 samples to give to other teachers, students and students' parents. These are not only economical but also demonstrate a social contribution in the complicated context of Covid-19.

SUCCESS
OF RED SNAPPER ARTIFICIAL BREEDING PROCESS

After more than 3 years of application, the project "transferring technology of artificial breeding process of red snapper in Khanh Hoa" by Dr. Ngo Van Manh (NTU) has achieved positive results. To date, most hatcheries have successfully implemented the process, meeting the needs of the market. The project contributes to diversifying the breeding subjects and creating more jobs and income for hatcheries in Khanh Hoa province.

After 4 years of implementation, those hatcheries have completely mastered the process from breeding to harvesting to packaging and transporting fingerlings. The fingerling's adapted commercial feeds are available on the market, helping minimize the negative impact on the environment thanks not to using trash fish. Each year, each hatchery produces from 1 million to 1.5 million red snapper fingerlings with the main consumption markets being Thua Thien Hue province and provinces in the western region of Vietnam.

To support this project, many seminars and training courses were organized to popularize the process to the farmers. Therefore, the production activity of red snapper fingerlings has been widely developed in Ninh Hoa, Nha Trang, Cam Ranh and provinces such as Ninh Thuan, Ba Ria and Vung Tau. Currently, there are about 20 hatcheries in the South Central and Southern regions of Vietnam.

CAREER COUNSELLING FOR NEARLY 600 HIGH SCHOOL STUDENTS IN NINH HOA TOWN

A delegation of lecturers and staff from NTU participated in a career counselling session for nearly 600 twelfth-grade students from Tran Cao Van High School, Ninh Hoa town, Khanh Hoa on January 6, 2020.

Through specific examples, faculties have shared, with students, skills they need to self-identify their own future careers and understanding the importance of making the right decision in career choice. Accordingly, to make the right choice, each student needs to have a proper awareness of their strengths and weaknesses, a clear awareness of the social needs of professional human resources and a thorough study of the strengths of higher education institutions to choose the right ones. Further more, students need to equip themselves with skills regarding self control, cultivate discipline, have a clear orientation and become independent therfore generating more opportunities to succeed in career and life.

NTU consitently and actively accompanies and supports career counselling for high schools students in Khanh Hoa and neighboring provinces with activities such as: giving schools career test software, facilitating them to visit and learn about training and scientific research activities of NTU and support career counselling, technological projects and basic IT applications.

LIST OF ARTICLES IN INTERNATIONAL JOURNALS

January1st- April 17th, 2020

No	Article	Journal	Author	Date
1.	Effects of human chorionic gonadotropin and gonadotropin releasing hormone analogue on plasma steroid hormones and spawning performances in golden rabbitfish Siganus guttatus	Journal of Applied Ichthyology	Hung Quoc Pham, Ut Van Phan, An Van Nguyen Augustine Arukwe, Hoang Minh Le	January 10, 2020
2.	Seasonal changes in three indices of gonadal maturation in male golden rabbitfish (Siganus guttatus): implications for artificial propagation	Fish Physiology and Biochemistry	Hung Quoc Pham & Hoang Minh Le	February 22, 2020
3.	Data envelopment analysis for analyzing technical efficiency in aquaculture: The bootstrap methods	Aquaculture Economics & Management	Le Kim Long, Le Van Thap, Nguyen Trong Hoai &Thuy Thi Thanh Pham	January 14, 2020
4.	Economic Performance and Capacity Utilisation in Vietnamese Purse Seine Fishery	Asian Fisheries Science	CAO THI HONG NGA*, ARNE EIDE, CLAIRE W. ARMSTRONG, LE KIM LONG	March 31, 2020
5.	Diverse Cooperative Field Membership and Small-Scale Producers' Access to Certification	Reviews in Fisheries Science & Aquaculture	Nguyen Thi Tram Anh and Curtis M. Jolly	01-2020
6.	Why we are not where we want to be: Dilemmas of English language teachers and learners in Vietnam	The Asian EFL Journal	Nguyen Thi Ngan, Francis Godwyll	3-2020
7.	Combined effects of a simulated marine heatwave and an algal toxin on a tropical marine aquaculture fish cobia (Rachycentron canadum).	Aquaculture Research	Minh-Hoang Le, Khuong V. Dinh, Minh V. Nguyen, Ivar Rønnestad.	(Accepted) 2020
8.	Improving the Accuracy of Ship Resistance Prediction using Computational Fluid Dynamics Tool	International Journal on Advanced Science Engineering Information Technology	Van Chinh Huynh, Tran Gia Thai	2020
9.	Resistance and Hull Form Optimization for Vietnamese fising vessels	Journal of Advance Research in Dynamical and Control Systems	Huynh Van Chinh, Tran Dinh Tu, Tran Gia Thai	2020

No	Article	Journal	Author	Date
10	Effect of Fructose and Ascorbic Acid on the Performance of Cross-Linked Fish Gelatin Films	Polymers	Pedro Guerrero, Iraitz Zugasti, Alaitz Etxabide, Huynh Nguyen Duy Bao, Trung Trang Si, Miriam Peñalba, Koro de la Caba	2020
11	Collective action governance and benefits distribution in the sturgeon value chain in Lâm Đồng province	Aquaculture	Tram Anh T.Nguyen, Kim Anh T.Nguyen, Hao CongTruong, Curtis M.Jolly	
12	Economic Efficiency of Extensive and Intensive Shrimp Production under Conditions of Disease and Natural Disaster Risks in Khánh Hòa and Trà Vinh Provinces, Vietnam	Sustainability	Kim Anh Thi Nguyen, Tram Anh Thi Nguyen, Curtis Jolly, Brice Merlin Nguelifack	3/2020
13	Improved method for production of chitin and chitosan from shrimp shells.	Carbohydrate Research	Trung, T. S., Van Tan, N., Van Hoa, N., Minh, N. C., Loc, P. T., & Stevens, W. F.	2020
14	Seasonal changes in three indices of gonadal maturation in male golden rabbitfish (Siganus guttatus): implications for artificial propagation.	Fish Physiology and Biochemistry	Hung Q. Pham, Hoang M. Le	2020
15	Effects of human chorionic gonadotropin and gonadotropin releasing hormone analogue on plasma steroid hormones and spawning performances in golden rabbitfish Siganus guttatus.	Journal of Applied Ichthyology.	Hung Q. Pham, Ut V. Phan, An V. Nguyen, A. Arukwe, Hoang M. Le	2020
16	Impacts of climate change on aquaculture in Vietnam: a review of local knowledge	Aquaculture Asia	Alexandra Johnson, Pham Quoc Hung	2020
17	Design and Development of a Novel Anticancer Peptide from Human Gut Microbiome by Using Recombinant Protein Engineering. In: 7th International Conference on the Development of Biomedical Engineering in Vietnam (BME7): Translational Health Science and Technology for Developing Countries	IFMBE Proceedings, 69 (69)	Thi Kim Cuc Nguyen, Thu Thuy Pham, Thi Bich Mai Huynh, Thanh Hoang Tran, Michael Packianather, Chi Hieu Le, Van Duy Nguyen	2020

No	Article	Journal	Author	Date
18	Multi-response optimization of the roller burnishing process in terms of energy consumption and product quality	Journal of Cleaner Production	Trung-Thanh Nguyen, Le-Hai Cao, Truong-An Nguyen, and Xuan-Phuong Dang	Published online, 2020
19	Multi-objective optimization of the flat burnishing process for energy efficiency and surface characteristics	Materials and Manufacturing Processes	Trung-Thanh Nguyen, Le-Hai Cao, Xuan-Phuong Dang, Truong-An Nguyen, and Quang-Hung Trinh	Published online 2020
20	Design of Advanced Injection Mold to Increase Cooling Efficiency	International Journal of Precision Engineering and Manufacturing-Green Technology	Hong-Seok Park, Xuan-Phuong Dang, Dinh-Son Nguyen, and Saurabh Kumar	2020
21	Application of Data-Driven Monitoring and Smart Quality Control for Injection Molding Process	International Journal of Automotive Technology	Saurabh Kumar, Hong Seok Park, Chang Myung Lee, and Dang Xuan Phuong	(Accepted) 2020
22	Multiobjective optimization of hard milling process of AISI H13 in terms of productivity, quality, and cutting energy under nanofluids MQL condition	Measurement and Control	Ngoc-Chien Vu, Xuan-Phuong Dang, Shyh-Chour Huang	(Accepted) 2020