

CAPSTONE OUTPUT - School Year 2019-2020

GRADE 12 - STEM STRAND

PROJECT TITLE	DESCRIPTION (a short paragraph describing what the project is about)	CATEGORY
ES Engine (EnviroSafe Engine)	EnviroSafe Engine is an innovative machine that strives to aid and restore the natural health of different communities and municipalities through turning plastic wastes into advanced building blocks that can be used in building infrastructures. Different types of plastic material are suitable to be recycled into blocks in this machine. This machine is divided into three parts, the shredder, injection machine, and manual compressor. Moreover, the machine and the building blocks that are produced will be highly invaluable and beneficial to the residents of the community as these will provide solutions to waste and sanitation problems direct towards the community.	Waste
Dual-purpose C² Bin	The Dual-purpose C ² Bin is a binary trash bin with the purpose of both composting organic wastes and compacting inorganic wastes. It is a machinery, particularly a multipurpose and durable garbage bin, that helps address the problems concerning solid wastes and energy sufficiency. Its purpose does not only segregates biodegradable waste materials from non-biodegradable ones, but it will also discard and process the said wastes for a more convenient utilization.	Waste
Hydro Ultraviolet Valve (HYDRUVVA)	It is a water pump that pressurizes the water in order for the residents to have fewer problems in acquiring filtered tap water. It has built-in UV ray light bulb tunnels that desterilize the water inside the water storage, the light bulbs are powered by a turbine which converts kinetic energy from the motion of water to mechanical energy then to electrical energy. It has water storage for the filtered water when not in use and allowing the user access clean water easily.	Water

<p>Plantable Bio Bags (P.B.B.)</p>	<p>(Not a machine but a replacement for plastics. Eradication is a long process. You can't solve the problem when the problem is present so why not replace the actual product. Prevention is better than cure.) A Plantable Bio Bag is a pro-environmental product that is plantable, recyclable, biodegradable, sustainable, cost-effective, and helpful in the mitigation of climate change. Embedded in the corn husk bags are calamansi seeds. After using the bag, it may be planted and grown into plants. These bags will leave no carbon footprint. Instead, it will leave a flowering plant that will convert carbon dioxide into oxygen throughout its life.</p>	<p>Air and Climate</p>
<p>BBM: Biomass Briquetting Machine</p>	<p>It is a machine that will compress and mold collected biodegradable wastes and turn it into block of briquettes that can be used as an alternative source of energy.</p>	<p>Energy</p>
<p>Luz Y Viento</p>	<p>The Luz Y Viento project is a proposal that aims to bring light to dark communities, primarily in the secluded areas of Barangay Calingatan, Mataasnakahoy, through an environment-friendly, and economic solution. In the pursuit of forming innovative solutions, the Luz Y Viento lamp was conceptualized-- It is a solar-powered, wind-powered, energy-storing street light that serves as an alternative to the customary street light that consumes electricity.</p>	<p>Energy</p>
<p>Solar Mushroom Lamp</p>	<p>The Solar Mushroom Lamp (S.M.L.) is a portable lamp that is solely powered by solar energy. The product would provide enough power to light households within the barangay in the night and in times of power shortages. Alongside with this, the product utilizes a 20W polycrystalline solar panel, as a primary source of sustainable energy instead of the normal non-renewable electricity. Within the mushroom cap made from acrylic plastic are the internal components of S.M.L. namely: 12V charge controller, 3.7V 3000mAh Lithium Polymer (LiPo) battery, 3S 12V 25A 18650 Lithium Battery Protection Board, 3.7V (3 slots) Battery holder, and PDX 14 wire. The internal components are connected with the external components, 10 W LED bulb placed in a glass cylinder.</p>	<p>Energy</p>
<p>Shredmix</p>	<p>The product proposed, also known as Shredmix, is a uniquely designed 4 feet tall Shredder-mixer in which it is made from construction supplies. The project is planned to have made from galvanized metal for rustproofing and to ensure its durability and sustainability. Such that its infrastructure is made up of the best quality materials, in which the product would be utilized efficiently for managing the waste. The project includes three main parts wherein it is composed of a shredder, mixer and framework.</p>	<p>Waste</p>

<p>SolarGen+</p>	<p>Due to the effects brought by the frequent power outage, the livelihood of the residents in Barangay Lodlod is significantly affected. Given this problem, the group generated an innovative product called “SolarGen+”. Unlike most power generators, this product does not use fuels such as gasoline instead, it uses renewable sources for energy production, specifically solar energy. SolarGen+ operates through solar panel electricity systems, also known as photovoltaics (PV), to capture the sun's energy using photovoltaic cells. In addition, these cells don't need direct sunlight to work and can still generate some electricity on a cloudy day. The cells convert the sunlight into electricity, which can be used to run household appliances and lighting. This solar generator could house its 80000 mAh battery in only 8 hours, enabling it to charge 7 phones at its full capacity and could accommodate appliances with its 3 built-in sockets. This product utilizes photovoltaic solar cells, increases efficiency, improves reliability and giving a bit of a twist on the concept of portability.</p>	<p>Energy</p>
<p>High-Pressure Sewer Cleaner</p>	<p>Urban floods are entirely manmade with poorly maintained drains, plastic bags, shrinking open spaces, and climate change contributing to the accumulation of water on roads after a heavy downpour. Crammed and overflowing garbage or wastes on canals resulting in a clogged space and obstructed inland waterways. Laynest’s High Pressure Sewer Cleaner removes sewer clogs by utilizing the jetting method. It uses power sprayer to be able to release a pressure high enough to push the garbage, so that it would be collected at the opposite side with the use of nets. The product utilizes the use of enzymatic cleaners creating a more effective and sustainable effect in comparison to the basic jetting.</p>	<p>Waste</p>

<p style="text-align: center;">LANDER</p>	<p>Lander is a landmass lancing device whose mechanism is derived from the mechanism of a syringe. Analogously, the Lander is a fertilizer pump consisting of a sliding plunger (i.e. the plunger can be pulled and pushed inside the precise cylindrical tube, or barrel, letting the Lander's syringe expel a liquid fertilizer through an orifice at the open end of the tube) that fits tightly in the tube. Lander incorporates the idea that a liquid fertilizer must be used since a liquid fertilizer is counterfeit to landmass composition that are characterized by soil porosity levels that are beneath the optimal threshold. Meaning, the liquid fertilizer, as a liquid (i.e. a state of matter that has no shape and takes the shape of the container that holds it whose atoms are temporary, thus allowing them to move freely and flow), will be able to penetrate through landmass and will be able to fill the spaces in between soil compartments, therefore, heightening the soil's nutritional levels and completing the soil's structural integrity.</p>	<p style="text-align: center;">Waste</p>
<p style="text-align: center;">EcoBrisk</p>	<p>The EcoBrisk is a machine which can make the process of creating ecobricks more efficient. Ecobrisk creates alternative construction blocks made by packing clean and dry plastics into plastic bottles, which serves as construction fillers. The EcoBrisk machine is equipped with a shredder that shreds including PETs, PPs and LDPEs into finer bits. With its compressor, it then packs the shredded plastics tightly into the bottle to quickly make a fully functional ecobrick. In the end the machine lessens the amount of plastics by speeding up the process of upcycling them into ecobricks.</p>	<p style="text-align: center;">Waste</p>
<p style="text-align: center;">Solar Panel with built in compartments</p>	<p>Humpback is a rubber road hump that slows down incoming vehicles for safety regulation, at the same time generates electricity from the kinetic energy of the passing vehicles in Barangay Balintawak. This will then be transformed to mechanical and eventually to electrical energy which is usable by households. The proponents decided on Humpback in hopes of helping the partner community, Barangay Balintawak with the problem of lack of utilization of renewable energy influenced by the absence of renewable energy sources and innovations in the area.</p>	<p style="text-align: center;">Energy</p>

Bulatech+ Vermicomposter	The proposed product Bulatech+ is an alternative way of composting animal manure into organic fertilizer to improve soil quality. The main foundation of the machine uses vermi (earthworms) to compost various forms of organic waste (e.g. animal manure, food scraps, & garden clippings). The product uses thermophilic and vermicomposting processes to produce vermicompost, a high quality organic fertilizer that is known for being homogeneous, contains desirable aesthetics and reduced levels of contaminants, and holds more nutrients over a longer period of time without adversely impacting the environment. Moreover, the vermicomposting procedure is faster than traditional composting methods, more convenient, and creates less odor.	Waste
PolyCon Mixer	PolyCon Mixer is an innovated concrete mixer equipped with a plastic shredder, which is powered by its connection to the bicycle rotors. It aims to enhance the usual concrete structure by making it five times stronger than the conventional concrete. It can help construct better pavements and infrastructures for the improvement of the industries in the society.	Waste
CC-Bin	CC-BIN is waste management tool that strengthens the waste management of Antipolo del Norte. The CC-Bin is divided into three separate containers, those for non-biodegradable waste such as plastic bottles, cardboard, and packaging. Then the non-compostable biodegradable section where organic wastes such as raw meat, dairy, or eggs will be put since they won't be easily composted. Last is the compostable biodegradable part where kitchen scraps or leftover can be made into compost.	Waste

GRADE 12 - HUMSS STRAND

PROJECT TITLE	DESCRIPTION (a short paragraph describing what the project is about)	CATEGORY
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<p>LIFE (Livelihood Initiatives For Economic Sustainability)</p>	<p>Livelihood Initiatives For Economic sustainability (LIFE) is a livelihood program that consists of a training workshop for the residents which would result in the economic enrichment of the chosen community by implementing a tutorial and demonstration of the operations of food processing specifically, the bottling and drying of fish. There will be a 4-Saturday session starting February 29 until March 21, wherein different activities about food processing specifically the making of bottled fish or fish in oil (tawilis) and dried tilapia will be conducted in Barangay Ambulong, Tanauan City. It mainly focuses on providing knowledge and equip the participants with the proper attitude and skills that would be pertinent in addressing the increasing rate of unemployment in the community.</p>	<p>Diversity and Affordability</p>
<p>ACERS - Advancing Comprehension in line with Enhancement of Reading Skills</p>	<p>Advancing Comprehension in line with Enhancement of Reading Skills (ACERS) is an educational-training type of program which is a CAPSTONE project of Group 12 Students from H12-01 of De La Salle Lipa. It aims to provide a free service of Wednesday Tutorial classes that will improve the three different kinds of comprehension namely the Literal, Inferential, and Critical Comprehension of children. Along with this, the project will also focus on enhancing the Oral Word Recognition and the Reading Levels of the pupils in grades four and five from Colonel P. Pasia Memorial School. Moreover, the said program which consists of five sessions is expected to start on the 12th of February, 2020.</p>	<p>Campus/Public Engagement</p>
<p>Lubag-Loob: Kaisahan ng Katawa't Kaisipan</p>	<p>Lubag-Loob: Kaisahan ng Katawa't Kaisipan aims to address the mental health problems existing in Barangay Tulay, Ibaan, Batangas by raising the residents' awareness on mental health through proper psychoeducation by means of a seminar and an open-forum, providing self-directives methods through communal yogic and meditational practices, and eradicating the stigma on mental health problems by strengthening the system of social support in the community. The project will be open to at least 50 residents who are interested in joining the program and can come from different age or social groups as mental health concerns everyone.</p>	<p>Campus/Public Engagement</p>

BIO-SCAPES	<p>BIO-SCAPES is a bipartite project that aims to reinforce proper waste management in the community through information, education, and communication (IEC), and to produce zero wastes by maximizing the purpose of recyclable materials and biodegradable wastes. The project also provide alternative livelihood for the residents.</p>	Waste
Live Your Life Well Campaign	<p>Live Your Life Well Campaign (LYLWC) will be a way to address the lack of awareness and awareness of the mental health of residents in the selected community. In addition, the group's project is to establish a positive social impact within the Barangay Darasa community in Tanauan City, Batangas. The program will be conducted through a seminar; professionals including a psychiatrist and a psychologist from the HealSpace Psychological Clinic will discuss a variety of topics on mental health where their expertise is useful to enhance residents' capacity and knowledge. Live Your Life Well Campaign (LYLWC) seeks to make residents understand that mental health is an integral and essential component of one's health wherein community members will be able to have a wider and deeper understanding that mental health is vital in every aspect and that it is crucial to their overall health. The project aims to strengthen the treatment of mental health issues and help prevent further mental health collateral, especially there are cases of suicide in Bernardo Lirio Memorial National High School. Live Your Life Well Campaign (LYLWC) will be an intervention to reduce stigma in the community, school, workplace, and other settings. Through LYLWC, residents can be able to develop the level of their mental health literacy and awareness; community members will be aware of contemporary social issues such as mental health-related problems that are prevalent in Barangay Darasa.</p>	Campus/Public Engagement

STEP (sama-samang Tataguyod ng Edukasyong Pangkaunlaran)	<p>Sama-samang Tataguyod ng Edukasyong Pangkaunlaran, also known as STEP, is a project that aims to improve student motivation and their outlook on learning, specifically focusing on Grade 1 youths. This will be done primarily through a seminar that will involve the children's parents as it is believed that parental involvement plays a key role in a child's development, education, and learning experience. Various speakers such as a teacher, a guidance counselor, and chosen parents will be invited to share information on parenting styles and techniques, children's gadget use, and a few other such topics in order to help the parents in guiding their children's growth. The secondary part of the project is the formation of a "free area" in the local public school, Colonel Pedro Pasia Memorial School, which will contain various games designed to help develop language and numeracy skills in the Grade 1 students while simultaneously allowing them to have fun. This will allow the children to develop a positive association with learning or build the mindset that "learning can be fun" which will help improve their motivation and focus.</p>	Campus/Public Engagement
WEALTH (Women Empowerment and Livelihood Training Help)	<p>It is a program in collaboration with International Training Center on Pig Husbandry (ITCPH) that aims to help the unemployed women of Mataas na Lupa by providing hands on training on Urban Gardening with Hydroponics</p>	Diversity and Affordability
Operation EEE (Engagement in Environmental Education)	<p>it is a program that aims to increase the environmental awareness of the residents of Brgy Sabang by providing a seminar on the 3rs (Reduce, Reuse, and Recycle).</p>	Waste
FABRICA (Focusing on the Allocation of Beneficial Resources for Impeccable and Creative Apparel)	<p>It is a livelihood program that aims to lessen the unemployment rate in Brgy. Tibig through providing a seminar about tailoring and thus producing quality and handmade products by their own people.</p>	Diversity and Affordability

LEAP (Livelihood and Employment for the Advancement of the People)	Seeing how prominent is the problem of the lack of opportunities for the residents of Barangay Balagtasin, Project LEAP was created. This program involves 2 phases namely 1) SEPP (Social Entrepreneurship Program for the People) wherein the group will partner up with GoNegosyo for the Kapatid Mentor ME symposium and the Regional Soils Laboratory for the on hand mushroom production training and 2) VOCTEM (Vocation Centered Technical Education for the Masses) wherein TESDA would provide TVET teaching agricultural, electronics, health care and social development, and aside from TESDA, BIIS would also partner up with the group for the Non-Destructive Training.	Coordination and Planning
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GRADE 12 - ABM STRAND

Name of Social Enterprise	Short Description of Social Enterprise	CATEGORY
The Cocoterro Food Company	The Cocoterro Food Company offers Empacoco — an empanada filled with innovative fillings utilized from Barangay Santor, Tanauan Batangas which promotes environmental awareness. Moreover, through the social enterprise's product, the residents will have the opportunity to become suppliers, manufacturers, and sellers which cultivates the primary objective of the social enterprise in alleviating unemployment rate in the community	Investment and Finance
Bannafit Co.	Bannafit Co. is an enterprise that aims to be a socially responsible business venture by creating a positive change to the lives of the people through promoting an innovative and a healthy product and to create a community where no one will start a day with nothing in their stomach.	Food and Dining
Delnutritivo Inc.	Delnutritivo Inc. is a social enterprise providing fresh and affordable banana and coconut based cookie snacks fit for children and teenagers, in accordance with its aims to battle malnutrition and unemployment within its partner barangay – Barangay San Salvador, Lipa City. The company also aims to promote sustainable and responsible production and consumption through its eco-friendly packaging.	Food and Dining
Dolce Patata Inc.	Dolce Patata Inc. aims to provide healthy yet delighting snacks made of sweet potatoes. The enterprise also aims to address malnutrition that is one of the major problems of the community.	Food and Dining

Salire Alto	Salire Alto aims to contribute change and innovation for the benefit of the people and the community, serving quality to help and empower the society and a vision to reach out to everyone, to be one with anyone.	Coordination and Planning
Capas Nutritivas Inc.	Capas Nutritivas Inc. was established with the goal of providing satisfaction for the customers and addressing the needs of the chosen community through Dolce Calabaza. A treat made up of layers of arrowroot, also known as uraro, mashed squash, and a mixture of all-purpose cream and condensed milk. There are also other variations offered such as Carrot Felicitas and Dolce Papaya.	Food and Dining
Collation Santé Co.	Collation Santé Co. aims to capture customers' interest by offering a snack called Crepe Roll. Crepe Rolls consist of sticky rice combined with variety of fruits to choose from, rolled into a flavored crepe. This unique snack guarantees to satisfy the sweet tooth of customers at an affordable price.	Food and Dining
Full Filling Corporation	Full Filling Corporation aims to bring change by creating sustainable livelihood through a product, The Pufftart, a pastry with savory filling that connects flavor and emotions, and inspiring others to uplift the community by having their own. To implement the CAPSTONE Initiative in Mataas na Lupa, two programs entitled The Art of Cooking and The Art of SUB-T (Start-Up Business Talk) are proposed.	Diversity and Affordability
Lumiere Corporation	Lumiere Corporation offers Ala Eh Cheesecake, a fruit cheesecake with paborita. The goal of minimizing the problem of unemployment, utilizing resources, and upholding the Batangueno made product is what inspired this creation. The program "KAPIT" will be implemented at Brgy. Pangao Lipa City to fulfill the CAPSTONE initiative.	Food and Dining
Limerence Corporation	Limerence Corporation aims to alleviate the living conditions of the residents of the chosen community, Brgy. Poblacion, Ibaan. Through the social enterprise's program, the students aim to reduce unemployment, provide other means of income, and promote locally-made all-natural soaps in the community. With the program's implementation, the students hope to provide the residents with physical, psychological, environmental, and economic benefits through the product, Savonnette, an all-natural soap that can fade stretch marks and blemishes, provide sun protection, and reduce waste.	Waste

Tanarcobaleno Corporation	Tanarcobaleno Corporation is a social enterprise that aims to provide a livelihood to the residents of Brgy. Balele by providing them an innovative lip product, the Magnifitint. The social enterprise will provide the residents, an affordable lip tint to serve as a source of income. Moreover, as the company produce the said program, it also maximize the usage of dragon fruit that is abundant to the chosen community.	Diversity and Affordability
Favor8 Food Corporation	Favor8 Food Co. aims to integrate their CAPSTONE initiative through the product "LasanYAAA!", a lasagna cooked and baked with fresh oyster mushroom instead of pork, to provide various health benefits to the customers and serve as an inspiration to every individual, especially the students, that they can build an innovative product with their young hands. Furthermore, the proponents also aim to lessen the burden of one of the existing problems in Brgy. Talisay, which is unemployment, by providing a source of livelihood while envisioning a world where every person has the opportunity to create sustainable products that will impact the economy, society, and environment.	Food and Dining
Celeste Bites Company	Celeste Bites Company wants to develop social responsibility and social innovation by coming up with a non-preservative and a healthy snack at such an affordable price. The social enterprise came up with Banacho Cookies, a combination of banana, apple, and chocolate chips. A innovative product that will give health benefits and with the mixture of fruits & sweetness of chocolate chips that everyone can enjoy. Applying the CAPSTONE Initiatives, thought a project called "Pangkabuhayang Swak sa Balsa, Banacho Cookies" to be implemented in Barangay Poblacion 6, Tanauan City. This project will give an extra income to those who wants to work in the company.	Food and Dining
JAM'est	JAM'est company has its objective of offering new and best way of consuming fruit jams, Banajam and Jamango, with breadsticks as dips. As a social enterprise, JAM'est aims to help Barangay Lodlod, its partner community, in addressing social problems faced by the community. Through the project, JAM'est para sa lipunan, the company aims to share experience and knowledge to serve as source of income to unemployed residents.	Investment and Finance

Magico Corporation	Magico Corp. offers a sustainable and environment-friendly skincare product - the Magico Mint Moisturizer. A moisturizer in a round reusable container that would be the link for the social enterprise to achieving their goal of solving the social problems of unemployment and utilization of excess natural resources found in Barangay Banay-banay, Lipa City through the program of "Trabaho Ko, Kaunlaran Ko". Through the said program, residents would be able to enjoy an opportunity of having additional income while also helping the environment.	Diversity and Affordability
PICOTALI Inc.	PICOTALI Inc. is a hybrid manufacturing company that, through providing high quality hygiene and utility products, strives to realize its vision of building a strong entrepreneurial venture that will serve to not only give great returns to its stakeholders, but also to spark meaningful social impact via addressing social issues such as unemployment within its partner communities. To further assist in realizing this endeavor, the social enterprise plans to launch two programs aimed towards issues in the community, which are, first, "Pera sa Basura", a waste management program and second, "Oplan Basura: Kolekta Mo, Bayad Ko", a program aimed towards alleviating unemployment.	Waste
Peritum Innovatio Corp.	Peritum Innovatio is a food manufacturing corporation committed to create a change and addressing unhealthy eating habits by offering nourishing and fulfilling food product.	Food and Dining
La Boca Feliz Food Corp	La Boca Feliz Food Corp. is a social enterprise which offers to make amazing food, offer warm service and give back to the neighborhood. The enterprise aims passionately expressing the love for the art of cooking through invigorating meals that would fill not only the appetite but also the heart of the customers. Presenting Tapsirolls, the Tapsilog cult classic with an innovative twist. It is Tapsilog innovated into a roll enclosed with a homemade wrap, accompanied by a drizzle of cheese sauce. Tapsirolls is a flexible meal which can be eaten during breakfast, lunch, and dinner. The product is able to give the target market's need nutrition, targeting the carbohydrate and protein levels of the customer. The proponents thought of "Project PORVENIR: Channelling A Better Future For the People of Today." This project aims to alleviate the unemployment problem in the said barangay, utilizing the resources found while caring for the environment.	Food and Dining

Juanderfood Synergy Enterprise	The Juanderfood Synergy enterprise is established to aid and support the livelihood of its partner community, Barangay Calamias, Ibaan, Batangas. In line with this, the enterprise aims to utilize the abundant resources of the barangay, specifically sweet potatoes, by converting it to an innovative food product, named Bucci.	Food and Dining
Festive Flavour Creations	Festive Flavour Creations is a social enterprise that aims to establish a helpful partnership with the community of Brgy. Tambo, Lipa City Batangas, by offering them project AYUDAsalle to help aid their number one problem which is high unemployment rate and low productivity rate This project teaches them how to make our product which is called as the PASTITAS, steamed handmade dough which has three different flavoured fillings inside namely chicken adobo, beef kaldereta and pork sisig and this comes with a specially made sauce.	Food and Dining
Vida Co.	Vida Co. is a company which aims to be able to establish social entrepreneurship business, wherein not only the company would be able to help the business owners, but also the community that has been chosen by the proponents. Since the social issue that the community currently has is mostly about unemployment, the company Vida Co, created a product wherein the community would be able to learn how to create the said product easily. The said products aims to be able to help the community to rise and be able to lessen the percentage of unemployment.	Investment and Finance
Arte Kavela Corporation	Arte Kavela Corporation is a social enterprise that aims to support the Barangay Taysan, San Jose, Batangas, by implementing the product known as Kafendel, an aromatherapy candle that strives to utilize the abundant resources in the community through using these to produce a scent made from coffee and herbs, and a dye made from variety of natural colorants. Furthermore, to successfully influence the community, programs such as "KAPE't Bising!" will be conducted to the manufacturer participants to widen their understanding of marketing the product together with the business.	Diversity and Affordability
LIPaholic Co.	LIPaholic Co. is a manufacturing/retailing business that offers a multipurpose aromatherapy lip balm. The social enterprise fully embraces the use of natural and organic raw materials.	Diversity and Affordability

LiPENyo Corporation	LiPENyo Corporation is a social enterprise that manufactures unique and innovative pen with the ink made out of coffee and housing from bamboo. The company caters students, workers, and events. Moreover, the company aims to lessen the unemployed by giving jobs to those in need, and at the same time inspire the community's residents in establishing their own business venture.	Diversity and Affordability
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