



Research and Publication Center

UM Tagum College

Mabini Street, Tagum City
Telefax: (084) 655-96071/Local 115

14705-2019-0122-0/___ Rev.0

TO : Research Associates
FROM : RPC Coordinator
RE : As stated

The Research and Publication Center would like to inform you that our Annual Inter-Department Research Congress is coming. This event will be held on February 18, 2019.

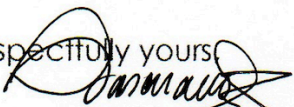
In line with this, may I request all the Research Associates to cascade it to your assigned department/program to submit two entries per program indicating (names of researchers, research titles, corresponding categories and 3 copies of the abstract) before February 8, 2019. The concept will be anything as long as it follows within the research priority areas and/or agenda of the University of Mindanao by the next five years (2017-2022).

Topics include:

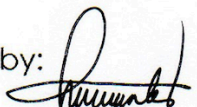
1. Promoting Economic Growth and Active Enterprise
2. Sustaining Biodiversity and the Environment
3. Advancing Technological Innovations
4. Sustaining Programs and Efficient Services
5. Engaging Public Opinion
6. Improving Social Well-being and Human Development

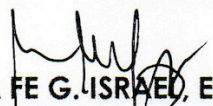
Thank you for your commitment to quality and excellence!


Respectfully yours,


LARCYNEIL P. PASCUAL
Head, Research and Publication

Noted by:


MARCK LESTER L. NAVALES, CPA, MBA
Assistant Dean of College


GINA FE G. ISRAEL, EdD
Dean of College


EVELYN P. SALUDES, EdD
School Director, VP for Branch Operations - Tagum



**UM Tagum College
Research and Publication Center**

“2019 Inter-Department Research Congress”

March 8, 2019, 8:00 a.m. - 11:30 a.m.

Mabini St., Tagum City

Session 1

*Topic: Promoting Economic Growth and Active Enterprise
Sustaining Programs and Efficient Services*

Venue: AVR 1

PROGRAMME

Opening Prayer

Phil. National Anthem

University Hymn

8:00-8:15

Audio-Visual Presentation

Audio-Visual Presentation

Audio-Visual Presentation

Introduction

of the Research Adjudicators

8:30-8:35

Prof. Armand James A. Vallejo

Research Associate, DTE

Reading of Mechanics/

Guidelines

8:35-8:40

Prof. Lovely Mae R. Prieto

Parallel Oral Sessions/

8:40-11:30

Session 1

**Topics: Promoting Economic Growth
and Active Enterprise/Sustaining
Programs and Efficient Services**

Giving of Tokens/Certificates

11:30- 12:00

Lunch

12:00 - 1:00

*Giving of Certificates for Best Oral Presenters, Participation and the like shall be done inside the session venue.

**The time slots assigned here are only tentative. Presenters are recommended to stay for the whole session in case of any absence.

***After the session, there will be a group photo for all presenters in this session.



**UM Tagum College
Research and Publication Center**

**“2019 Inter-Department Research Congress”
March 8, 2019, 1:00 p.m. - 4:30 p.m.
Mabini St., Tagum City**

Session 2

*Topics: Sustaining Biodiversity and the Environment/
Advancing Technological Innovations*
Venue: AVR 2

PROGRAMME

**Opening Prayer
Phil. National Anthem
University Hymn**
1:00-1:15

Audio-Visual Presentation
Audio-Visual Presentation
Audio-Visual Presentation

**Introduction
of the Research Adjudicators**
1:15-1:20

Engr. Rowena Dapar (RA, DEE)

**Reading of Mechanics/
Guidelines**
1:20-1:25

Engr. Irene Sumicad (RA, CS/IT)

Parallel Oral Paper Presentation
1:25-4:30

**Session 2
Topics: Sustaining Biodiversity and
the Environment/Advancing
Technological Innovations**

**Giving of Tokens/Certificates
to the Panel Reactors/Presenters**

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**UM Tagum College
Research and Publication Center**

“2019 Inter-Department Research Congress”
March 8, 2019, 1:00 p.m. - 4:30 p.m.
Mabini St., Tagum City

Session 3

*Topics: Engaging Public Opinion/ Improving
Social Well-being and Human Development*
Venue: AVR 3

PROGRAMME

Opening Prayer

Phil. National Anthem

University Hymn

1:00-1:15

Audio-Visual Presentation

Audio-Visual Presentation

Audio-Visual Presentation

Introduction

of the Research Adjudicators

1:15-1:20

Prof. Aleja Abella (RA, DCJE)

Reading of Mechanics/

Guidelines

1:20-1:25

Prof. Nexofelou Gono (RA, HM/TM)

Parallel Oral Paper Presentation

1:25-4:30

Session 3

**Topics: Engaging Public
Opinion/Improving Social Well-being
and Human Development**

Giving of Certificates

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**UM Tagum College
Research and Publication Center**

“2019 Inter-Department Research Congress”

March 8, 2019, 8:00 a.m. - 4:30 p.m.

Mabini St., Tagum City

Venue: AVR 1 (PLENARY HALL)

PROGRAMME

Part I.

**Opening Prayer
Phil. National Anthem
University Hymn**

Audio-Visual Presentation
Audio-Visual Presentation
Audio-Visual Presentation

Opening Remarks

Dr. Evelyn P. Saludes
School Director/VP - BOO

Part II.

Rationale

Prof. Larcyneil P. Pascual
Head, RPC

**Introduction of Session Chairs/
Members & Tabulators**

Prof. Armand James A. Vallejo
RA, DTE

**Introduction
of the Panel Reactors
per session (Oral/Poster)**

Prof. Lovely Mae R. Prieto
Moderator

**Reading of Mechanics/
Guidelines**

Prof. Raiza Mae C. Narciso
RA, DBAE

Part III.

Simultaneous

**Parallel Oral Paper Presentation
Session 1 (9:00a.m. - 11:30a.m.)**

Venue: AVR 1

Research Agenda: Promoting
Economic Growth and Active
Enterprise/Sustaining Programs and
Efficient Services

Session Chair:

Prof. A. James A. Vallejo (RA, DTE)

Member:

Prof. Lovely Mae R. Prieto



**UM Tagum College
Research and Publication Center**

“2019 Inter-Department Research Congress”

March 8, 2019, 8:00 a.m. - 4:30 p.m.

Mabini St., Tagum City

Venue: AVR 1 (PLENARY HALL)

PROGRAMME

Part III.

Poster Presentation

Venue: AVR 2-SCL-AVR 1- Lobby

Time: 9:00a.m. - 11:30a.m.

Moderator:

Prof. Earl Jones G. Muico

Part IV.

Simultaneous

Oral Paper Presentation

SESSION 2 (1:00p.m. - 4:30p.m.)

Venue: AVR 2

Research Agenda: Sustaining Biodiversity and the Environment/Advancing Technological Innovations

Session Chair:

Engr. Irene Sumicad (RA, CS/IT)

Member:

Engr. Rowena Dapar (RA, DEE)

SESSION 3 (1:00p.m. - 4:30p.m.)

Venue: AVR 3

Research Agenda: Engaging Public Opinion/Improving Social Well-being and Human Development

Session Chair:

Prof. Nexofelou Gono (RA, HM/TM)

Member:

Prof. Aleja Abella (RA, DCJE)



**UM Tagum College
Research and Publication Center**

**“2019 Inter-Department Research Congress”
March 8, 2019, 8:00 a.m. - 4:30 p.m.
Mabini St., Tagum City
Venue: AVR 1 (PLENARY HALL)**

P R O G R A M M E

Part IV.

Simultaneous

Oral Paper Presentation

SESSION 4 (1:00p.m. - 4:30p.m.)

Venue: AVR 1

Research Priority Areas/Agenda

1. Promoting Economic Growth and Active Enterprise
2. Sustaining Biodiversity and the Environment
3. Advancing Technological Innovation
4. Sustaining Programs and Efficient Services
5. Engaging Public Opinion
6. Improving Social Well-being and Human Development

Session Chair:

Dr. Marilyn C. Arbes (RA, DASE)

Member:

Prof. Raiza Mae C. Narciso (RA, DBAE)

***Prof. Lovely Mae R. Prieto
Emcee***

Note!

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**UM Tagum College
Research and Publication Center**

“2019 Inter-Department Research Congress”

March 8, 2019, 1:00 p.m. - 4:30 p.m.

Mabini St., Tagum City

Session 4

(Multidisciplinary)-Graduate School

Venue: AVR 1 (Plenary Hall)

PROGRAMME

Opening Prayer

Phil. National Anthem

University Hymn

1:00-1:15

Audio-Visual Presentation

Audio-Visual Presentation

Audio-Visual Presentation

Introduction

of the Research Adjudicators

1:15-1:20

Dr. Marilyn C. Arbes (RA, DASE)

**Reading of Mechanics/
Guidelines**

1:20-1:25

Prof. Raiza Mae C. Narciso (RA, DBAE)

Parallel Oral Paper Presentation

1:25-4:30

Session 4 (Multidisciplinary)

Topics include:

1. Promoting Economic Growth and Active Enterprise
2. Sustaining Biodiversity and the Environment
3. Advancing Technological Innovation
4. Sustaining Programs and Efficient Services
5. Engaging Public Opinion
6. Improving Social Well-being and Human Development

**Giving of Tokens/Certificates
to the Panel Reactors/
Presenters**

Dr. Marilyn C. Arbes (RA, DASE)

Prof. Raiza Mae C. Narciso (RA, DBAE)

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Order of Oral Paper Presentation (March 08, 2019)

Session 1

**Topics: Promoting Economic Growth and Active Enterprise/
Sustaining Programs and Efficient Services**

Time: 9:00-12:00/Venue: AVR 1 (Plenary Hall)

Session Chair: Prof. Armand James A. Vallejo (RA, DTE)

Member: Prof. Lovely Mae R. Prieto (DTE)

*Giving of Certificates shall be done inside the session/plenary hall.

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9:00-9:15	<p>UGMAD: THE HISTORY OF FARMING IN TAGUM CITY</p> <p>Proponents: Alcontin, Casili-an, Tio</p> <p>Presenter: Clarissa M. Escuadra, Department of Teacher Education</p> <p>Abstract: This study was conducted to trace the history of farming in the city of Tagum. The narrative of the almost-forgotten history of how agriculture emerged is presented in this study. The participants were farmers and tribal members who were known to be the earliest settlers in Tagum City. An interview was done through in-depth and focused group discussion held in Tagum City and Barangay Hijo. This research followed the qualitative method applying the archival and phenomenological approach aiming to gather data that will lead to discovering the roots of farming. The agricultural sector contributed to the progress of the city's economic stability. With that, knowing how farming began is the missing puzzle to complete the city's rich history. This study aimed to help every Tagumenyo recognize the roots of the city's success and to make them understand the valuable work of every farmer. This study focused on uncovering the advent of farming in Tagum City, domestication of animals and the crops produced for consumption and trading. It also included the changes that occurred in farming when it comes to strategies and management, socio-economic factors, the suitability of agriculture in the area as well as the routes used in trading the farming products.</p> <p>Keywords: <i>BSED Social Studies, history, agriculture, farming, ugmad, Tagum City, Philippines</i></p>
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9:15-9:30

Proponents:

Presenter:

Abstract: The AB Maningo farm is a farm in Tagum City which offers agritourism. This study measured the level of agritourism preparedness in Tagum City in terms of attractions; access; accommodation; activities; and amenities, and purported a Tourism Development Plan based on the result. A quantitative method was used to measure the level of agritourism preparedness in Tagum City. The respondents of this study were employees of PENRO, CENRO, City Tourism Office, and AB Maningo Farm workers including the owner. The total number of respondents were 50. This study was conducted in Tagum City. The researcher used a statistical tool which is the weighted mean to measure the level of agritourism preparedness in Tagum City as basis for tourism development plan. The study results that the level of Agritourism Preparedness in Tagum City is observed in terms of the attractions, activities, accommodation, amenities, and access. The indicator for agritourism preparedness that was observed in Tagum City is which obtained the highest mean is on access. Attractions were also observed in the farm by the respondents. Accommodation and amenities obtained the same mean score and are currently unavailable in the AB Maningo Farm. Finally, activities obtained the lowest mean score which is low and it implies that it needs improvement.

Keywords: *Tourism, Level of agritourism, agritourism preparedness, Tagum City, Philippines*

Session 2

**Topics: Sustaining Biodiversity and the Environment/
Advancing Technological Innovations**
Time: 1:00p.m.-4:00p.m./Venue: AVR 2

Session Chair: Engr. Irene Sumicad (RA, CS/IT)
Member: Engr. Rowena Dapar (RA, DEE)

*Giving of Certificates shall be done inside the session/plenary hall.

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***After the session, there will be a group photo for all presenters in this session.

1:00-1:15	<p>HYDROPONICALLY GROWN PLANT VIGOR OF PECHAY PLANT (<i>Brassica rapa Linn</i>)</p> <p>Proponents: Noemi Labador Alfar, Aldemar Ranjit Cañon Cabonce, and Myreal Salumro Labinguisa, Department of Teacher Education</p> <p>Presenter: Noemi Labador Alfar, Department of Teacher Education</p> <p>Abstract: Hydroponics gained popularity of growing plants in an aquatic environment. Growing of plants in hydroponics uses nutrient solution to sustain plant needs in water. It does allow the root of the plants to have contact with the nutrient solution and having access to oxygen which is essential to plants to grow. Hydroponically grown plants it increases the rate of the growth in maturation up to twenty-five percent faster and produce almost thirty percent more than those plants grown in soil. This study explored the effectivity of the formulated nutrient solution LAC (25% v/v) & NAM (50% v/v) to the growth of Pechay plant <i>Brassica rapa Lin</i> in terms of height, live weight and number of leaves. ANOVA showed a significant difference ($p \leq 0.01$) in height ($p \leq 0.01$) live weight ($p \leq 0.05$) and number of leaves ($p \leq 0.01$) of <i>Brassica rapa Linn</i>. The nutrient solution used in a hydroponic gardening contains macronutrients, micronutrients and trace elements found in a fertile soil. However, cost-effectivity analysis showed that the formulated nutrient solution is slightly expensive since it comes as commercial product and can be purchase online. Further research is recommended to reduce cost and improve production using hydroponics.</p> <p>Keywords: <i>BSED Biological Sciences, Hydroponics, Nutrient Solution, Pechay plant (Brassica rapa Linn, Philippines</i></p>
1:15-1:30	<p>FULLY AUTOMATED DOSING FOR HYDROPONICS SYSTEM: A SELF-SUSTAINING URBAN PLANTING FROM SEED TO HARVEST</p> <p>Proponents: Joey Mangubat, Diana Argote, and Rosemel Agosto</p> <p>Presenter: Diana Argote, Electronics Engineering</p> <p>Abstract: This study aimed to fully automate dosing of a hydroponics system for self-sustaining urban planting from seed to harvest. The design</p>

	<p>included options to choose from available crop selections and load new crops with required parameters. Then, a monitoring system tracked water quality necessary for plant growth. To monitor water quality necessary to sustain plant life, an electronically programmed pH sensor and EC sensor were submerged in the hydroponic bed. For optimum result, a tentacle shield was used to eliminate crosstalk between sensors. The data gathered by the sensors will be fed into a software application where decisions were made as to the dosing of fertilizers. The result demonstrated a dedicated peristaltic pump that will dose off immediately a pH UP or pH DOWN solution directly to the growing tray once the measured pH level of the crop is out-of-range. Moreover, the design testing evidently showed the workability of the system.</p> <p>Keywords: <i>Hydroponics, Urban Farming, Hydroponics Automation, Dosing, Philippines</i></p>
<p>1:30-1:45</p>	<p>DEVELOPMENT OF ELECTROCHEMICAL CELL USING SODIUM CHLORIDE SOLUTION: AN ALTERNATIVE SOURCE FOR LIGHTING AND MOBILE CHARGING</p> <p>Proponents: Thea Caryl Villa Abrille, Kimberly Arimao, and Florianne Sanchez</p> <p>Presenter: Thea Caryl Villa Abrille, Electrical Engineering</p> <p>Abstract: The research entitled “Development of Electrochemical Cell Using Sodium Chloride Solution: An Alternative Source for Lighting and Mobile Charging” aimed to provide an alternative solution for cases of power outages. Through this research, people in remote areas where electricity has not been introduced yet will be able to use this as an alternative source of electricity. The design’s concept is reverse desalination. If energy is needed to desalinate water, then reversing the process would give out energy. This theorem is applied by using a sodium chloride solution as an electrolyte for the electrodes to produce potential difference. At the end of the research, the proponents were able to create a salt water battery that produces 12 V, 500mA has been accomplished, two 3W, 12 V DC, LED lamps were lighted, and a mobile phone was charge respectively. Moreover, the salt water battery obtained an approximate efficiency of 80%.</p> <p>Keywords: <i>Salt, Saline Solution, Saltwater Battery, Philippines</i></p>
<p>1:45-2:00</p>	<p>AUTOMATED CLASSROOM ENERGY MANAGEMENT AND ATTENDANCE MONITORING SYSTEM</p> <p>Proponents: Ruby Jane Casas, Gleeson Cameros, and Norlyn Macaigad,</p> <p>Presenter: Ruby Jane Casas, Electronics Engineering</p> <p>Abstract: Students’ attendance is manually checked by the faculty. With the increasing demand of enrollees, the higher the workloads</p>

there is to cope with the necessity of monitoring every student's attendance. As such, this research work aimed to address this problem. This automated classroom energy management and attendance monitoring system is designed for energy conservation purposes and for monitoring students' attendance daily. The RFID reader detects the RFID tags which is attached to the student's and professors' I.D. and will automatically register to the database. The electronic devices (which include ceiling fan, electric outlets and lights) will automatically turn on only for scheduled classes in the aforesaid room to avoid wastage of electricity. The system has RFID for tag detection; Arduino which serves as the base system for RFID, Raspberry PI for control of overall management system, Local Area Network (LAN) for professors' database connection, and router which is used to tie the whole network.

Keywords: *Radio Frequency (RFID), Arduino, Rasperberry PI, Local Area Network (LAN), MySQL, Philippines*

Session 3

Topics: Engaging Public Opinion/Improving Social Well-being and Human Development
Time: 1:00p.m.-4:00p.m./Venue: AVR 3

Session Chair: Prof. Nexofelou Gono (RA, HM/TM)
Member: Prof. Aleja Abella (RA, DCJE)

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1:00-1:15	<p>TABI-TABI PO: KULTURA NG KATATAKUTAN SA MGA MATA NG MGA MODERNONG LAAKENYOS</p> <p>Mananaliksik: Cherry May S. Jagonob, Winna Joy C. Petorbos at Felix L. Umantod, Jr.</p> <p>Presenter: Winna Joy C. Petorbos, Kagawaran ng Edukasyon</p> <p>Abstrak: Ang layunin ng pananaliksik na ito ay malaman ang pananaw ng mga partisipante tungkol sa kultura ng katatakutan at panitikang Filipino upang alamin kung patuloy pa ba itong pinaniniwalaan ng mga modernong kabataan sa kabila ng pag-usbong ng makabagong teknolohiya sa kasalukuyan. Ang mga datos na aming nakalap ay ginamitan ng kwalitatibong pamamaraan sa uring penominolohikal. Ang mga partisipante ay kasalukuyang nag-aaral sa mataas na paaralan ng Laak National High School. Gumamit ng Purposive Random Sampling ang aming ginawang pag-aaral na kung saan ay binibigyan ng pantay-pantay na pagkakataon ang bawat kabahagi na maging partisipante upang maging tiyak at wasto ang makukuha naming detalye. Sa pag-aaral na ito mayroon lamang kaming labing-apat (14) na partisipante, pito (7) para sa <i>In-depth Interview</i> (IDI) at pito (7) naman sa <i>Focused Group Discussion</i> (FGD). Lumabas sa aming pag-aaral na ang kulturang katatakutan at panitikang Filipino ay unti-unting namamatay dahil sa pag-usbong ng makabagong kinahihiligan ng mga kabataan dulot ng makabagong teknolohiya at maaari rin itong mapanatili kung gagamitin sa tamang paraan ang teknolohiya. Mapapalaganap, papanatili at maprepreserba ang kultura ng katatakutan at panitikang Filipino na pinamana pa ng ating mga ninuno upang maibahagi sa susunod na henerasyon.</p> <p>Mga susing salita: <i>Medyor sa Filipino, Modernong Laakenyos, Makabagong teknolohiya, Kultura ng katatakutan, Panitikang Pilipino.</i></p>
	<p>TRAINING AND DEVELOPMENT AND PERFORMANCE AND PRODUCTIVITY AMONG EMPLOYEES OF LGU ASUNCION</p> <p>Proponents: Darwin S. Mandante, Mary Grace S. Mancera and Mecca Diane C. Rosal</p>

<p>1:15-1:30</p>	<p>Presenter: Darwin S. Mandante, Department of Business Administration</p> <p>Abstract: The objectives of this study were to determine if there is a significant relationship between training and development and performance and productivity among employees of LGU Asuncion using quantitative non-experimental research design utilizing correlational technique. This study used random selection of regular and casual employees of LGU Asuncion with a total of 125 employees as respondents of this study. Mean and Pearson (r) were the statistical tool used as data treatment of the study. Results showed a high level of training and development among employees of LGU Asuncion in terms of organizational commitment, cognitive dimension, and flexibility to adapt (internal and external factors). The study also showed a high level of performance among employees of LGU Asuncion in terms of accuracy, completeness, and speed. Also, the study showed a high level of productivity among employees of LGU Asuncion in terms of job performance, use of technology, machines, and tools, and work methods. Moreover, there were significant relationships between training and development and performance, and training and development and productivity. Therefore, training and development improve performance and increase productivity among employees of LGU Asuncion.</p> <p>Keywords: <i>Human Resource Management, Training and Development, Performance, Productivity, Qualitative Non-Experimental Research, Correlational Technique, Random Sampling, Region XI, Philippines</i></p>
<p>1:30-1:45</p>	<p>MANAGING OVERCROWDED JAIL: THE QUALITATIVE PERSPECTIVES OF THE JAIL PERSONNEL</p> <p>Proponents:</p> <p>Presenter:</p> <p>Abstract: This study talked about the perception of the jail personnel and their insights in managing overcrowded jail and to uncover what are the different experiences of the jail personnel in management difficulty and to study how the personnel managed to keep going while having such experiences was its purpose. This also included the alternatives and procedures they made to cope up with the tasks delegated to them as a jail personnel. There were 14 informants involved in the study, 7 in the In-depth interview (IDI) and another 7 from the focus group discussion (FGD). Furthermore, the study used the phenomenological approach of qualitative study. Records of the interviews were analyzed using the themes with the help of an expert. Ten (10) themes emerged from the two main question addressed. Moreover, this phenomenological study could enhance awareness in the real-life situations happening in our jails today. As more additional laws to be enacted and more law offenders will be imprisoned, thus contributes to the jail congestion.</p> <p>Keywords: <i>BS Criminology, jail personnel, jail overcrowding, jail management difficulty, Philippines</i></p>

Session 4

Time: 1:00-4:00/Venue: AVR 1 (Plenary Hall)
Session Chairs: Dr. Marilyn Cabanlit-Arbes (RA, DASE)
Prof. Raiza Mae Calbonero-Narciso (RA, DBAE)

Multidisciplinary (Professional School)

University of Mindanao-Research Priority Areas/Agenda (2017-2022)

Topics include:

1. Promoting Economic Growth and Active Enterprise
2. Sustaining Biodiversity and the Environment
3. Advancing Technological Innovations
4. Sustaining Programs and Efficient Services
5. Engaging Public Opinion
6. Improving Social Well-being and Human Development

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1:00-1:15	<p>KALAINAN ITANDING: A LINGUISTIC COMPARATIVE OF THE MORPHOLOGICAL FEATURES OF MANDAYA AND KALAGAN LANGUAGES</p> <p>Proponent/Presenter: Juvynel C. Maduay, MAEd - Teaching English</p> <p>Abstract: The purpose of this study was for linguistic recording and to edify the morphological features of Mandaya and Kalagan languages from the viewpoint of the participants through in-depth interview and focus group discussion. Phenomenological approach was employed to highlight the culture and practices of the 20 Mandaya and Kalagan participants in one of the Municipalities in Davao del Norte. Findings revealed that the participants considered that both Mandaya and Kalagan languages have similarities and differences. Both tribes possess uniqueness of the language. There are different words used in different instances like words used for kinship, greetings and in getting to know each other, giving description and taste, giving directions, instructions and asking information. There are also words used in stating commands, requests and in complaining, asking directions and words used in the market. To understand the feature of both languages, it requires thorough understanding, both languages also have conflicting meanings and terminologies and differences on the accent. The findings also revealed the morphological structures of Mandaya and Kalagan languages like tenses of verbs. Finally, the different insights of Mandaya and Kalagan were revealed such as always use the language, train the younger generation, language as legacy and pride for the language. It was likely that paying attention to Mandaya and Kalagan would strengthen more the acceptance of Mandaya and Kalagan in the society in general.</p> <p>Keywords: MAEd- Teaching English, Mandaya, Kalagan, morphological features, Philippines.</p>
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<p>1:15-1:30</p>	<p>OPERATIONS MANAGEMENT AS PREDICTOR OF THE ORGANIZATIONAL PERFORMANCE OF AN ISO CERTIFIED INSTITUTION</p> <p>Proponent/Presenter: Hammiel O. Agustin, Master of Business Administration</p> <p>Abstract: This study aimed to determine the specific domain of operations management that best predicts the organizational performance of 262 employees of an ISO Certified Institution in Tagum City. The researcher used adapted questionnaire for the independent variable. On the other hand, the researcher has employed a secondary data for the Organizational Performance through various tools such as customer satisfaction survey, exit survey, evaluation of teachers by the students, by the administrators and by the dean. Moreover, this study made use of the quantitative non-experimental using causal-effect technique and has employed universal sampling. Results revealed that the respondents had a very high level of operations management and a very high level of organizational performance. The results also implied that there were no significant relationship between operations management and organizational performance of the respondents. Moreover, operations management has no influence in the organizational performance of the institution. Hence, this implies that the existing operations management of the institution may not directly affect the performance of the institution with regards to human resource results and customer satisfaction.</p> <p>Keywords: <i>Business administration, operations management, organizational performance, Philippines</i></p>
<p>1:30-1:45</p>	<p>QUALITY OF WORK LIFE AND ORGANIZATIONAL COMMITMENT OF EMPLOYEES OF TAGUM CITY</p> <p>Proponent/Presenter: Allimar M. Nuevo, Master of Business Administration</p> <p>Abstract: This study aspired to find out which domain in the quality of work life that significantly influences the organizational commitment of hotel employees. The quantitative non-experimental design utilizing causal-effect was used in the study. The respondents of the study were the 200 hotel employees working in the hospitality industry with diverse range of working experience and levels of academic background from one year and above of school year 2018-2019. Mean, Pearson-r and Regression Analysis were the statistical tools employed to interpret the data gathered. The findings of the study revealed a very high level of quality of work of hotel employees in terms of work environment, employee welfare and well-being, work-life balance, job characteristics and compensation and benefits. It was also revealed that the organizational commitment of employees was high level in terms of affective commitment, continuance commitment and normative commitment. The result of the study confirmed that there was a significant association between the quality of work life and organizational commitment of employees. It was found that the domains of quality of work life showed that compensation and benefits, employee welfare and well-being and work-life balance significantly influenced the organizational commitment of employees.</p> <p>Keywords: <i>Management, quality of work life, organizational commitment, employees, Philippines</i></p>

Poster Session (March 08, 2019)

Venue: Lobby (in front of SCL to AVR 1)

Poster Session Chair: Prof. Earl Jones G. Muico

Members: Prof. Jon Inocentes (RA, DAE)/Prof. Larcyneil P. Pascual

Time: 09:00a.m.-12:00nn

9:00-9:15	<p>ACTERIAL ANALYSIS OF CATFISH (<i>Clarias batrachus</i>), MUDFISH (<i>Channa striata</i>) AND FRESHWATER TILAPIA (<i>Oreochromis niloticus</i>)</p> <p>Proponents: Lovely F. Borres, Brixter E. Cocoy, and Meralyn E. Jauod</p> <p>Presenter: Brixter E. Cocoy, Department of Teacher Education</p> <p>Abstract: Microorganisms may colonize the skin, gills and gut of fish reflecting the bacterial load of aquatic environment. Altogether three (3) freshwater fishes, including catfish (<i>Clarias batrachus</i>), mudfish (<i>Channa striata</i>) and tilapia (<i>Oreochromis niloticus</i>) were collected. Samples of gills, skin and gut of freshwater fishes were examined for the Total Viable Bacterial Count (TVBC). Catfish (<i>Clarias batrachus</i>), mudfish (<i>Channa striata</i>) and tilapia (<i>Oreochromis niloticus</i>) were examined for microbiological quality and compared to the recommended levels of U.S Food and Drug Administration (FDA) and Environmental Protection Agency for fish and fisheries products. The results revealed based on the colony forming unit per millimeter that microbial levels for the three freshwater fishes. In conclusion, the three (3) freshwater fishes often exceeds the acceptable range based on U.S FDA and EPA microbiological criteria and thus implores risk to human health.</p> <p>Keywords: catfish (<i>Clarias batrachus</i>), mudfish (<i>Channa striata</i>), tilapia (<i>Oreochromis niloticus</i>), bacterial load, total viable bacterial count (TVBC), microbiological quality, acceptance range.</p>
9:15-9:30	<p>ELECTRONIC PLASTIC BOTTLE REWARD BIN: A REVERSE VENDING MACHINE FOR WASTE POLYETHYLENE PLASTIC BOTTLE</p> <p>Proponents: Bill Harry Tagimacruz, Joben Delola, and Danilo Arat</p> <p>Presenter: Bill Harry Tagimacruz, Electronics Engineering</p> <p>Abstract: This study intended to develop a reverse vending machines (RVM) which accepts polyethylene (PET) plastic bottles and rewards the user accordingly. Plastic waste is now a large task that calls for comprehensive, national to international or global approach that involves rethinking, recycling strategies for consumers. With these facts, the proponents decided to create a prototype of an electronic plastic bottle reward bin that can accumulate the reward points of the user when depositing PET plastic bottles. The machine features include redemption of reward with corresponding redeem points. When a bottle is feed to the machine, it is then scanned and identified. The acceptable (PET) bottles underwent a volume reduction process. For every accepted bottle, a corresponding point is accumulated. If the accumulated points reached</p>

	<p>the desired redeem points. the system will automatically dispense a coin. In this way, wise recycling and green engineering are promoted.</p> <p>Keywords: <i>Discipline RVM, PET Bottle, recycling, reward, redeem points, eco-friendly green engineering, Philippines</i></p>
<p>9:30-9:45</p>	<p>THE EFFECTS OF SERVICE QUALITY AND PHYSICAL ENVIRONMENT ON CUSTOMER SATISFACTION TOWARDS BUSINESS ESTABLISHMENTS IN TAGUM</p> <p>Proponents:</p> <p>Presenter:</p> <p>Abstract: The primary goal of the study was to determine if there is a significance influence of service quality and physical environment on customer satisfaction among households in Tagum City. Quantitative non-experimental design using correlational technique was the method used in this study, utilizing random sampling technique in the selection of the respondents. The subjects of the study were the 300 households in Tagum City coming from Barangay Magugpo East and Barangay Poblacion, Tagum City. The overall results of service quality, physical environment and customer satisfaction among households in Tagum City is all very high. In addition, results revealed that there is a significant relationship between Service quality and Customer Satisfaction as well as Physical Environment and Customer Satisfaction.</p> <p>Keywords: <i>Marketing Management, Service Quality, Physical Environment, Customer Satisfaction, Quantitative Non-Experimental Research using Correlational Technique, Random Sampling, Households, Tagum City, Region XI, Philippines</i></p>



RESEARCH AND PUBLICATION CENTER

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Davao del Norte

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PROGRAM DESIGN

I. IDENTIFYING INFORMATION:

- A. Activity Title : **Annual Inter-Department Research Congress 2019**
- B. Implementing Organization : This activity is to be implemented by the Research and Publication Center (RPC) of UM Tagum College for all student-researchers.
- C. Participants : UM Tagum College Students
- D. Venue : AVR 1, AVR 2, and AVR 3 of UM Tagum College
- E. Date & Time : February 18, 2019 (Monday), 8:00 - 5:00PM

II. Rationale

Research has become already a determining factor in the elevation of status in the Higher Education Institutions (HEIs). Its widespread dissemination and utilization in the school potentially creates an institutional brand which significantly attracts stakeholders and builds meaningful and productive linkage to the other agencies.

In UM Tagum College, several research outputs have been produced annually which validate the application and utilization of research agenda. Furthermore, it has been the traditional practice of the school to disseminate research outputs to introduce new creation of knowledge and to establish platform for community involvement.

III. Objectives

It is in this purposeful reason that this Inter-Department Research Congress shall be conducted. Specifically, this activity shall aim to:

1. disseminate information on the significance of research;
2. establish research-oriented school environment; and
3. utilize research outputs for curricular/academic enhancement and community development.

IV. Facilitators

The RPC Staff and the Research Associates will facilitate on the said undertaking:

1. Prof. Larcyneil P. Pascual

2. Dr. Marilyn C. Arbes
3. Prof. Raiza Mae C. Narciso
4. Prof. Alleja Abella
5. Prof. Nexofelou Gono
6. Prof. Jon Inocentes
7. Engr. Irene Sumicad
8. Engr. Rowena Dapar
9. Prof. Armand James A. Vallejo

V. Program Flow

Opening Prayer
 Phil. National Anthem
 University Hymn
 8:00-8:15

Audio-Visual Presentation
 Audio-Visual Presentation
 Audio-Visual Presentation

Opening Remarks
 8:15-25

Dir. Evelyn P. Saludes
 School Director, VP/BOO - Tagum

Rationale
 8:25-8:30

Prof. Larcyneil P. Pascual
 RPC, Coordinator

Introduction
 of the Research Adjudicators
 Session Chairs/Moderators
 8:30-8:35

Prof. Armand James A. Vallejo
 Research Associate, DTE

Keynote Speech 1
 8:35-9:00

Prof. Earl Jones G. Muico
 Program Head, AB-English

Parallel Oral Sessions/
 Poster Presentations

Sessions 1 & 2
 Topics: University Research
 Room: AVR 1/SCL Lobby

9:00-12:00NN

LUNCH
 12:00-1:00

Bistro

Parallel Oral Sessions
 1:00-5:00

Session 3 & 4
 Topic: UM Research Agenda
 Venue: AVR 3 & OPL

VI. Proposed Budget

(See attached document)