

## 1.1 Curricular Planning and Implementation

### English Department Curriculum Enrichment Program 2015-2020

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Curriculum-Enrichment Program	English/UCC	21 <sup>st</sup> -23 <sup>rd</sup> Sep, 2015	20	11	Dr.R.G.Abraham
Program Outcomes:					
<p>This programme was a brainchild of the Department of English and the Principal Dr. S.R.Lyndem . It was a three-day adventure from the 21<sup>st</sup>-23<sup>rd</sup> , September, 2015 and attended by the students and faculty of the Department. Dr. R.G.Abraham , an esteemed Professor of St. Stephen's College, Delhi agreed to come and deliver his brilliant lectures to the students of the English Department. The number of participants was 20-25, excluding the teachers.</p> <p>Excitement filled the air when the day came for the programme to commence. There was an inaugural session where the Principal, Dr. S.R. Lyndem introduced the Resource Person to the faculty and students , where Mr Edward Karunakaran , the Head of the Department warmly welcomed him. Dr. R.G.Abraham was indeed resourceful and he enlightened the students on important topics ranging from Modernism to Phonetics. He expounded on the Stream of Consciousness Technique , with special reference to Virginia Woolf and her novel-'To the Lighthouse'. He enunciated to his audience by introducing the importance of Rhetoric and Prosody in eloquent speaking and communication skills. He then explicated on the role that Sigmund Freud played in understanding the human psyche better and the intention of psychoanalysis to make the unconscious conscious.</p> <p>The students of the Department of English were deeply enriched by the program. The Resource person kept in mind the needs of the students at all times and the over-all experience was indeed a memorable one.</p>					

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Folklore and its importance in Literature	English/UCC	21 <sup>st</sup> Feb, 2019	15	30	English Department
<p>Program Outcomes: (Maximum 500 Words)</p> <p>Folklore, by simple definition, is the lore of the people. It generally incorporates folk songs, folk dances, myths, legends, folktales which are believed to be handed down from one generation to another through oral tradition . But the scope of folklore is much wider. It encapsulates material and non-material, verbal and non-verbal cultures. Therefore, an attempt to study folk culture in its true sense, one should therefore, include an analysis of agriculture, agrarian history, settlement patterns, dialectology of folk speech, folk architecture, folk cookery, folk costumes, the notion of time in folk society, i.e. folk year, folk religion, folk medicine, folk recreation, folk literature, folk play ,folk arts and crafts. The list is in-exhaustive, but it does suggest the fact that the area of folk culture, thus, embraces into its fold the total way of life.</p> <p>An orientation on 'Folklore and its importance in Literature' was held on 21st February, 2019, from 11:30 am to 1:30 pm by the Department of English for its students at the RUSA Conference Room. Around 45 participants joined the program The orientation was conducted by the teachers of the Department, namely, Dr. Rebecca, Dr. Julie, Ms Barbie, Ms Darlene, MsLongnam, and Sir Fengkha, to show the pupils how rich of a source the native folklores can be, their importance in shaping literature and also to inspire the pupils to take up such studies in their future endeavours. The programme was as follows:</p> <p>Introduction – Dr. Rebecca Lalrintluangi, HOD</p> <p>Narration of Khasi folk tales - Ms. B.R. Lyngdoh on Dain Thlen</p> <p>Mrs. Darlene Sawian on Noh KaLikai</p> <p>A brief history of Thomas Jones and his influence on the Khasi society-</p> <p>Ms. LongnamKharpuri</p> <p>Remarks- Dr. Julie Sun Wahlang</p> <p>Vote of Thanks- Mr. FengkhaDaimari</p>					



Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Physical Theatre Workshop	English/UCC	4 <sup>th</sup> -24 <sup>th</sup> Sep, 2018	13	7	MsLapdiangSyiem

Program Outcomes: (Maximum 500 Words)

The RUSA Cell under the Equity Initiatives Programmes funded by the Ministry of Human Resource Development, Govt. of India organised a 10-day workshop on **Physical Theatre** for the students of Union Christian College, Umiam from 4th – 24th September, 2018. The workshop was specifically meant for students with a keen interest in theatre and acting. The workshop helped the students to use their body movements as the key instrument for storytelling rather than relying on dialogue. Well-known theatre personality, **LapdiangSyiem**, who has done various work all across the globe was called in as the resource person to take the classes. **20 students** from various departments were given a certificate of participation at the end of the workshop.

#### Details of Participant

Immediately after the announcement was made that the workshop would be conducted, there was a good response from the students of various departments including the Departments of English, Education, History and Geography. 20 students were given a certificate of participation at the end of the sessions. Following are the students who attended :

1. AbisakLalduhzuali (BA III English)
2. Drau Kumar Reang (BA III Education)
3. Gaurav Baba (BA III English)
4. James Van Bawi Biak Zual Ling (BA I English)
5. JesicaRabha (BA III English)
6. KananmoiaDarlong (BA III Geography)
7. KapitorDebbarma (BA V English)
8. LeikeeYouton (BA I English)
9. LetgouhaoHaokip (BA I History)
10. LiliDawe (BA I English)
11. Mai Dol (BA I English)
12. NabamTath (BA I English)
13. NaoremChinglensana Meitei (BA III English)
14. Pol Lamgu (BA V English)
15. SonamPema (BA I English)
16. SillionReang (BA I English)
17. SuzylaPamshong (BA I English)
18. Trinity Daimari (BA III English)
19. UditKiranBhumij (BA III Geography)
20. VarmoiaDarlong (BA V Education)

## **Inaugural Session**

The workshop was formally inaugurated by Dr. Joseph Matthew, Vice-Principal, Union Christian College at 3:30 pm on 4th September, 2018 in the College auditorium who welcomed the Resource person in the presence of Miss Barbie, Miss Darlene and Miss Longnam from the Department of English.

## **Workshop Sessions**

The workshop had altogether 10 sessions, each session of approximately 2 hours. During these sessions, various exercises on breathing, relaxing the body, using space, body postures and voice modulations were taught, which helped in exploring the imagination of the participants to an all-new horizon.

The following exercises were taught on the respective sessions :

### **Day 1 (4th September, 2018; Tuesday)**

**Venue : College auditorium**

**Time : 3:30 pm – 5:30 pm**

- Breathing exercise (exhale and inhale)
- Walking exercise (understanding the posture, pace and rhythm of various characters)

### **Day 2 (5th September, 2018; Wednesday)**

**Venue : College auditorium**

**Time : 3:30 pm – 5:30 pm**

- Breathing exercises (warm up techniques)
- Walking exercises (walking in a crowd without interfering others' space)

**Day 3 (6th September, 2018; Thursday)**

**Venue : College auditorium**

**Time : 3:30 pm – 5:30 pm**

- Breathing exercises (warm up techniques)
- Walking exercises (manipulation of knees, toes and feet for different types of walking styles)
- Working with masks (displaying emotions through masks using only body actions)

**Day 4 (10th September, 2018; Monday)**

**Venue : College auditorium**

**Time : 3:30 pm – 5:30 pm**

- Breathing exercises
- Relaxation techniques (with massages)
- Voice exercises (humming, manipulating voice with stomach, chest, nasal cavity and head)

**Day 5 (14th September, 2018; Friday)**

**Venue : College auditorium**

**Time : 3:30 pm – 5:30 pm**

- Working with elements (movement of body in the elements – air, water, earth and fire)
- Breaking the fourth wall
- Acting with the masks
- Creative inspirations from paintings

**Day 6 (17th September, 2018; Monday)**

**Venue : College auditorium Time : 3:30 pm – 5:30 pm**

- Walking pace (on scale of 1-10)
- Dramatic reading

**Day 7 (19th September, 2018; Wednesday)**

**Venue : RUSA Conference Room**

**Time : 3:30 pm – 5:30 pm**

- Audio-visual showcase of various forms of physical theatres
- Showcase of Miss Lapdiang's past performances all across the globe

**Day 8 (20th September, 2018; Thursday)**

**Venue : RUSA Conference Room**

**Time : 3:30 pm – 5:30 pm**

- Meditation
- Working with the 9 emotions
- Dramatic reading

**Day 9 (22nd September, 2018; Saturday)**

**Venue : College auditorium Time : 10 am – 12 noon**

- Breathing exercises
- 9 emotions
- Sitting positions

**Day 10 (24th September, 2018, 2018; Monday)**

**Venue : RUSA Conference Room**

**Time : 3:30 pm – 5:30 pm**

- Exploring emotions with colours
- Demonstration of short skits inspired by paintings
- Understanding emotions from paintings

### **Valediction**

At the end of the last day, a short Valedictory session was held in the RUSA Conference Room, in the presence of Miss Barbie, Miss Darlene and Sir Fengkha. The participants shared their experiences, and a certificate of participation was awarded to the participants followed by a light refreshment.

### **Feedbacks by participants**

- *...I came to know that acting is not solely about portraying a character in front of an audience but...so much beyond that...helped me come out of my comfort zone and be more comfortable and confident with my body...helped me understand paintings...*

~AbisakLalduhzuali

- *...tremendously bee's knees...made me aware of my breathing patterns varying with different emotions...importance of my gait...helped me to dramatisecolours and depict my emotions on stage...*

~Drau Kumar Reang

- *It taught me the importance of body postures and facial expressions...acting is not merely about delivering dialogues...expanded the horizons for inspirations through colours and all the elements around...*

Gaurav Baba





Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Performance of 'Arms and the Man'	English/UCC	1 <sup>st</sup> March, 2018	170	140	Drama Club

Program Outcomes: (Maximum 500 Words) In the late Thursday evening of March 1<sup>st</sup>, 2018, Union Christian College witnessed the stage production of one of George Bernard Shaw's most beloved comedies, *Arms and the Man*, performed by the Drama Club of the English Department. After the end of the evening Chapel service, the students flocked into the College auditorium. The show was hosted by Nina Mushahari. After an introductory speech by Madam Darlene, the curtains were raised and the play started at 7:00 pm with a houseful audience including the Principal, students teachers and staff members.

In the opening scene, which establishes the play's embattled Balkan setting, young Raina learns of her suitor's heroic exploits in combat. She rhapsodizes that it is "a glorious world for women who can see its glory and men who can act its romance!" Soon, however, such romantic falsifications of love and warfare are brilliantly and sometimes hilariously unmasked in a comedy that reveals Shaw at his best as an acute social observer and witty provocateur. Bluntschli (Gaurav Baba), a Swiss mercenary, hides in the bedroom of a Bulgarian heiress, Raina (Trinity Daimari), during a war – an event that causes consternation when Sergius (Pol Lamgu), her swaggering cavalry-officer fiancé, finds out. As so often, Shaw's trick is invert stereotypes. As a practical soldier, Bluntschli finds chocolate more useful than cartridges in the heat of the battle and the heroic Sergius turns out to be a quixotic idiot.

Gaurav Baba was outstanding as Bluntschli, lending him just the right quality of shrewd omniscient sanity – a nice mix of brisk pragmatism and suppressed idealism. Trinity Daimari admirably captured the tension between Raina's posturing romanticism, and the flushed excitement of real passion. But the highlight of the play was the chemistry between Louka and Sergius played wonderfully by Abisak Lalduhzuali and Pol Lamgu respectively. Louka's defiance and self-assertion, trying to prove equality of humanity despite the difference in class and manners was passionately portrayed by Abisak. Pol Lamgu was picture-perfect as the stupidly vain Major Segius. All fire and fervour, easily with the best lines; the audience could not help but fall in love with him. The husband-wife duo of Major Petkoff and his wife Catherine was played by Rituraj Singha and Grace Sailo with characteristic flair. Special mention to Naorem Chinglensana Meitei, who gave an honest performance as the household help, Nicola.

The performance was scripted and directed by the collective efforts of Nina Mushahari, Sarup Chakma and Reshmi Hrangkhawl, who also acted as the narrator. The ambience of the play set by the music, arranged by Benjlai Daimari. The actors adorned the costumes intricately prepared by Sajra Debbarma, Teken and team. Luchemlu and team's stripped-down set beautifully encapsulated the nuances of a Bulgarian household. The college auditorium was transformed into the enchanting land of *Arms and the Man*, and for that, their efforts are commendable. In the end, the Principal spoke briefly about the significance of the play, especially in today's Socio-political climate. On the whole, the stage production of *Arms and the Man* in Union Christian College was a success. Since the play is a part of the curriculum, it helped the students to envision a different perspective on it, and helped in their academics, besides providing merely entertainment, thus fulfilling one of the basic aims of education – learning by experience.



Item/Title of the Program	OrganisingDept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Symposia on Story-telling and Women's Writing	English Dept, NEHU	9 <sup>th</sup> ,10 <sup>th</sup> Nov,2015	4	5	Sahitya Akademi

Program Outcomes: (Maximum 500 Words)

On 9<sup>th</sup> and 10<sup>th</sup> , November, 2015, Sahitya Akademi in association with the Department of English, North Eastern Hill University sent out their invitations to the Department of English of the different colleges in Shillong and its outskirts. Union Christian College was one of the privileged ones to be invited. All avid lovers of literature attended this auspicious program.

Dr Rebecca Lalrintluangi escorted the nine students of the 2<sup>nd</sup> Year of the Department on the first day. On the second day, MsB.R.Lyngdoh and Ms D. Sawian took them on the second day. Gideon Hrangkhawl, FwrmanNarzary, SuariDebbarma, KaidemAjit Kumar, Bina Das, GyatiNadoYami, Lydia Darthangkim, PhelongWangsha and Blessing Kalai were privileged to be part of the audience. It was a spiritual experience to listen to the sessions on poetry reading by Madam TemsulaAo , whose truthful poetic expressions reverberate her mastery of the art. The poems took us to another realm indeed. There was a personal sharing from a torch bearer, a journalist from Nagaland by the name of MonalisaChangkija ,who from scratch , built her own 'empire'- of owning her own publishing house and getting the advantage of coming to the rescue of women writers, who were still budding artists. Ma'am Sukalpa also spoke on North East literature , in particular ,the writings of TemsulaAao .Ma'am Esther Syiem also presented a brilliant paper. After listening to the stories of writers and so many invigorating sessions, it was indeed an inspiration to us all.

The two-day program was, indeed ,truly beneficial to the students who attended it and they carried these beautiful memories back to UCC

Item/Title of the Program	OrganisingDept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Performance of 'U ManikRaitong'	English/UCC	28 <sup>th</sup> August,2015	160	140	-

Program Outcomes: As part of the Cultural Program of the Consultancy Meeting of North East Indian Christian Colleges held at Union Christian College, the Drama Club had the privilege to showcase the brilliant performance of 'U ManikRaitong' on the 28<sup>th</sup> August, 2015. The whole auditorium was packed to the brim with an excited audience- the Principal, staff, students, friends and esteemed guests were all part of(300 approximately). The stage was transformed into the rustic world of the Ri- Bhoi Hills, in Meghalaya.

The play opened with the sound of a chant of the mystical land of the clouds and the rustics were seen harvesting in the fields. This folktale is about the figure of U Manik , who is regarded as the archetypal lover and the dispenser of the tradition of love and music in the Khasi society. Fwrman brilliantly played U Manik and the whole hall was deeply moved by his performance. Reshmi captured the attention of the audience by her beauty and she took the role of LiengMakaw perfectly. Her husband the Syiem (king) was acted by Rudolph , whose boyish charm, did not disappoint and he performed the role majestically. Grace, with her poise and grandeur commanded the stage as the role of the king's mother. Barilang captured the true essence of an overprotective khasi mother as she did a brilliant job playing the role of LiengMakaw's mother. The role of the uncle was taken by Benjlai and Gideon as the Lyngdoh. Joshi, Jwurang ,Odi, Sarup were some of the rustics in the play. The audience was enthralled by the talent showcased on stage that night.

This Khasi folktale not only entertained everyone at one level, but, in fact, its tragic nature reveals a society which is bounded by superstition and lack of empathy that led to the ostracizing of an orphan, who lost all his family members at a young age. The lack of love in a marriage and loneliness led LiengMakaw into the arms of the protagonist and also, into the pyre. It also reflects the subjugation of women by the patriarchal structure. All in all, everyone was overwhelmed and as the last curtain drew to a close, the Drama Club received a standing ovation.

**BEHIND THE SCENES:**

The Costumes- by MrKharbamon.

The Sound System - by MrPynshaiSawian.

Music done by MrMaxterWarjri.

Backdrop painting by JepikaKinimi.



**Commerce Department Curriculum Enrichment Program 2015-2020****Commerce Department Curriculum Enrichment Program 2015-2020**

Item/Title of the Program	OrganisingDept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Educational Visit to Stock Brokerage firm	Bidya Fiscal Services Ltd	10 <sup>th</sup> December, 2018	8	7	

**Program Outcomes:**

On 10<sup>th</sup> December, 2018, 15 students along with 4 staffs from the Department of Commerce visited Bidya Fiscal Services Ltd, a leading share broker in Shillong. The business is situated in Police Bazar and is a well-known establishment which acts as a one-stop destination providing services to both local as well as other customers. The firm strongly believes in customer satisfaction while providing its services.

The resource person for the day was a warm and enthusiastic man. He started off the session with a quick introduction to Stock Exchanges. Stock Exchanges are the facilities where stockbrokers and traders can buy and sell securities, such as shares of stock, bonds and other such financial instruments. The resource person gave us an insight into the day-to-day life of a stockbroker. We were given a glimpse into how they start their day, by keeping tabs on the market even before the Stock Exchanges are open and how they end their day much after the Stock Exchanges are closed, to ensure they provide the best services to their customers so as to ensure that the interests of the investors are secure.

Stock brokers, we learnt, are responsible for the handling of the portfolio of the investors and they provide investors with advice regarding which stocks to invest in and when the best time is to invest in the stock and what are the risks and returns pertaining to the stocks an investor may be interested in.

The students were enthusiastic to learn about the practical applications of the papers they have studied and they asked the resource person many questions about stocks, the stock exchange and how to invest in stocks.

All in all, the students participated actively in the session and the session ended on a good note with the resource person agreeing to guide the students, if they ever wished to invest, in the future.

Item/Title of the Program	OrganisingDept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Industrial Visit	MCCL (Mawmluh Cherra Cement Ltd)	December 9 <sup>th</sup> 2016	30	15	Mr. P.K Sharma (Process Manager)

Program Outcomes:

The department of Commerce Union Christian College organized a one day Industrial visit to **MCCL (MAWMLUH CHERRA CEMENT Ltd., Sohra on 9 December 2016** for Commerce students of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year students

Mawmluh-cherra Cements Ltd is a Public incorporated on 20 May 1955. It is classified as State Govt Company and is registered at Registrar of Companies, Shillong. Its authorized share capital is Rs. 800,000,000 and its paid up capital is Rs. 728,285,120. It is involved in Manufacture of non-metallic mineral product.

It was a good experience, which has provided exposure to all the students especially the final year students with industrial life.

The students have benefited in terms of the technical details and the manufacturing process and organisational structure provided by the company on an important part of Manufacturing process by Company's profile and its exposure to competition towards other similar industries.

They conducted around 30 minutes of the seminar session which covered the following details:-The presentation session was conducted by Mr. P.K. Sharma (Process Manager) with regards to the following topics:-

1. Profile of the company.
2. Raw materials for the product.
3. Geographical market of the product.
4. Technology used in making the product.
5. The social benefits of the industry in the near locality.
6. The reduction of the price of the product to the near locality.
7. Changing from wet process of manufacturing to dry process.
8. Employment opportunity.
9. Provided that the factory is following as per the provisions of the factory's ACT, Workmen Compensation ACT.
10. Finally they had shown us infrastructure of company and facility they provide to Company employees.

The students and all the four staff members have enjoyed the technical endeavour at the Factory. The company persons also appreciated our students after the question answer sessions. The visit seems to be very informative and gave a good learning experience.

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Educational Visit	Bidya Fiscal Services Ltd, Chartered Accountant firm	24 <sup>th</sup> 25 <sup>th</sup> & 26 <sup>th</sup> November, 2015 (3 days)			Shri. B.P. Bajoria (Bidya Ltd)

Program Outcomes:

15 students along with 4 staff from the Department of Commerce visited Bidya Fiscal Services Ltd on 24<sup>th</sup> and 26<sup>th</sup> November and 25 students along with the 4 staff visited a Chartered Accountant Firm on 25<sup>th</sup> November, as a part of field exposure for the students.

**Bidya Fiscal Services Private Ltd** in Shillong is one of the leading businesses in Share Brokers. It is known to provide top service in the following categories: Share Brokers, NSE Share Brokers. During the two days' visit, the students were exposed to the workings of stock brokers and they were provided with in-depth information about stock exchanges and the various products and services that the stock brokers deal with.

The resource person was very friendly and he responded to all the questions the students had with regards to Stock Exchanges and the services provided by stock brokers to its customers with enthusiasm. He started off the session by talking about the Stock Exchange and giving information into their working, such as the working hours of the stock exchanges, the list of major stock exchanges in India and instruments that are traded in the stock exchanges. This was followed by the services which a stock broker, concentrating on Bidya Fiscal Services, provides to its customers.

Brokers are the people who handle customer orders to buy and sell securities. In the same way that a grocery store acts as a middleman between shoppers and the companies that produce food, a broker acts as a middleman between the securities that trade on the market and the investors who buy them. Their primary job role dictates obtaining of purchase and sale orders and execution of the same. The group learnt that the main functions a broker performs includes helping and advising investors, conducting market research, taking investment decisions, among others.

The group that visited the Chartered Accountant Firm also boasted about learning the practical applications of the areas of their study. They were given a brief introduction into the field of Chartered Accountancy and the ICAI. During the day, they learnt about vouching and the importance of preparation of the Financial Statements and how a CA conducts his day to day work, from field visits to organizations which require their services to the preparation of accounts and the filing of Income Tax Returns for various organizations.

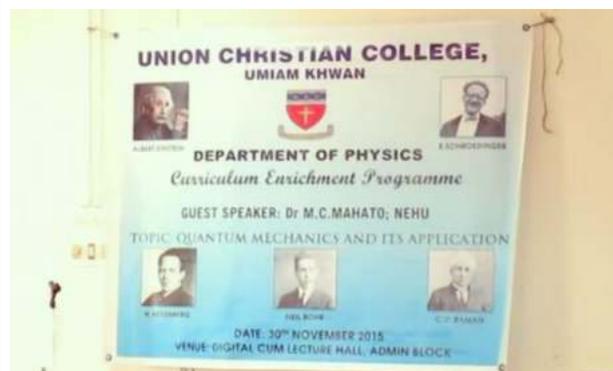
The field visits ended with a short Q and A session.

### Physics Department Curriculum Enrichment Program 2015-2020

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Curriculum Enrichment Programme	Physics Department	30 <sup>th</sup> November 2015	30	20	Prof. M.C. Mahato (Physics Department NEHU)

**Program Outcomes: (Maximum 500 Words)**

The programme was of great benefits to students and faculties as well. Prof. M.C. Mahato, one of the famous physicist from North Eastern Hill University delivered a popular lecture on 'Quantum mechanics and its applications'. Quantum Mechanics was taught in the under graduate level and this particular lecture enriched the knowledges of students and teachers. Interaction with the resource person in the form Q@A and elaborate discussions were encouraged.



Item/Title of the Program	OrganisingDept/ Collaborating Agency	D ate & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Inter School Science Exhibition Competition	Physics Department as member of Science Society	3 <sup>rd</sup> September 2019	40	43	All Science Department faculties with Shri. B.A. Tiewla, A.R.O, DistrictPlanning Office, Nongpoh as the Chief Guest.
Item/Title of the Program	OrganisingDept/ Collaborating Agency	D ate & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Inter School Science Exhibition Competition	Physics Department as member of Science Society	3 <sup>rd</sup> September 2019	40	43	All Science Department faculties with Shri. B.A. Tiewla, A.R.O, DistrictPlanning Office, Nongpoh as the Chief Guest.

**Union Christian College Science Society Curriculum Enrichment Program 2015-2020**

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Inter School Science Exhibition Competition	UCC Science Society	3 <sup>rd</sup> September 2019	40	43	All Science Department faculties with Shri. B.A. Tiewla, A.R.O, District Planning Office, Nongpoh as the Chief Guest.

**Program Outcomes: (Maximum 500 Words)**

From the students' and teachers' feedbacks, everyone were benefited through this program and thanked the College for organizing and the office of the District Planning Officer for sponsoring. Interaction with the faculty members of the college enriched their knowledge and understanding about the different topics in Science and Technology. Through the visit to all the Departments, students got motivated by the experimental demonstrations and discussions. The Scientific exhibits and innovations displayed by the seven different schools added additional in depth knowledge to everyone and will find applications in the near future for solving human and social problems.



### Physics Department Curriculum Enrichment Program 2015-2020

Item/Title of the Program	OrganisingDept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Invited Lecture on <b>“The central teaching of the Philosophy of Mahatma Gandhi”</b>	Physics Department as member of Science Society	25 <sup>th</sup> November 2019	25	29	Dr. (Miss) Alpana Chakraborty , Department of Philosophy, St. Anthony’s College.

**Program Outcomes: (Maximum 500 Words)**

An Invited lecture in commemoration of the 150<sup>th</sup> birth anniversary of Mahatma Gandhi was a very successful as more than 50 participants were present including the Principal Dr. R.M. Manih, teaching and non teaching staffs of the Science Departments and students. The lecture was for one and half hours long followed by an open discussion. The speaker delivered an in-depth knowledge and meaning to the teaching and vision of Mahatma Gandhi. Students as well as teachers actively participate in the discussion hour with the resource person.



## **Nutrition Department Curriculum Enrichment Program 2015-2020**

### **JIVA RESORT, POLO ORCHID visit by Nutrition Department**

An orientation visit to Hotels to study the food service units and layout was organized at two prestigious resorts in Cherrapunjee. The visit was a one day tour. The visit was organized on 11th March 2018.

The main objectives of this visit is

1. To study the different type of food service unit.
2. To learn the essential in and out service of food and beverage department.
3. To study the layout of a kitchen. To gain practical insights on food production area.

The Department had organized an orientation visit to Jiva Resort and Polo Orchid Resort which is located at Cherrapunjee a valley of pristine beauty enveloped with misty mountain and external waterfalls.

Collectively 13 students with two faculty members visited the resorts. The students left the College premises by 7:30a.m. and reached the destination by 12:00 noon. On arrival, students were warmly welcomed by the General Manager. He gave a brief description about the hotel, the amenities and the services they provide. After briefing the manager then took us to different sections of the hotel, focusing mainly on two areas of study the food production area and the restaurant. During the orientation the students ask many questions related to hotel industry. This was a great experience for the students and a wonderful learning about the system followed in the hospitality industry.

Jiva Resort is a nestled hearth of Khasi Culture. It is located in Cherrapunjee (Sohra) the resort conjures images of clouds coming home to smuggle amidst this picturesque heaven. It is located in a perfect site with beautiful garden.

Once you check in at this home away from home, spread out amidst a heavenly ambience, there is a sense of quite serenity. Every room affords a view into green hills and dales. Here is where nature does its spectacular dance offering the visitor a glimpse into as many as four seasons in a day. One moment it's sunny and then clouds float up the valley bringing sudden showers. The resort has a beautiful air conditioned rooms with heating systems. If you are privilege to be staying in the suite with the Jacuzzi and a balcony then your holiday in Sohra is made. For those stressed out by the daily grind of life Jiva Resort promises a refreshing break. It has a gym and emanate out of a modern kitchen that churns out a lip smacking cuisine down to the most scrumptious desserts. It offers a wide range of veg and non veg items.

Other facilities include half court basketball, garden, gym, pool game, table tennis, indoor chess and carom board, Golf course and burnt fire place for in house guests with live bands.

#### **KITCHEN**

Entering the kitchen, we were

introduce to a head chef where he briefed us regarding the food production, the different types of cuisines, the cooking methods and the hygiene sanitation carried out in food production area.

Detailed description about the Kitchen t is a rectangular shaped kitchen with 4Units for each cuisine. Each unit consists of washing sink, the preparation area and the cooking area. Beside each unit are small attached shelves mainly for storing the spices and condiments. It was a great opportunity lor the students as they were able to get an inside look into the food production area. In the kitchen, there is a receiving area, the washing area, the pre preparation area, the preparation and the pantry area required for service. Foods prepared by the chef are placed directly in a Bain Marie to keep the food warmed over a short period of time and cater transfer into buffet. Food contained in the buffet should be clean, hot and presentable. The kitchen is well equipped with providing cold storage and dry storage at room temperature. It has good lighting faculty and exhaust fan to eliminate heat from the kitchen. There are many racks and shelves for storing essential goods and is easily reachable. The floor is smooth and clean and washed after each major meal preparation i.e. morning and evening. There is also a good drainage system. There is also a good supply of clean and filtered water.

RESTAURANT The food at Jiva Resort Restaurant is truly excellent, surrounded with beautiful and delightful elegant blended with an informal and friendly atmosphere. It is a multi-cuisine restaurant offering wide choices of cuisines namely Indian, Chinese, South and Continental. It is a well equipped and furnished restaurant with high brand crockery, cutlery and linen. It has an independent bar, entertainment facilities and above all the quality of services. The restaurant has 11 tables with 6 covers and live counters on each table for any grilled items. Each covers is well balanced with all cutlery and other table appointments.

#### SERVICES

1. Complementary breakfast for in guest. Timing 7a.m. - 10a.m.

It offers ala' carte menu for lunch and dinner. It offers table d'hôte for group booking more than 25 members.

Table d'hôte menu includes both veg and non veg items with distinctive juices.

Rs. 1000/- for Non Veg

Rs.750/- for Veg. It offers wide choices of beverages, Non alcoholic,

Alcoholic and Refreshing

drinks.

6 The menu is attached in this report.

## Mc CROWN Orientation visit by Nutrition Department

An orientation visit to Hotels to study the food service units and layout was organized at two renowned hotels in the city of Shillong. The visit was a one day tour. The visit was organized on 6<sup>th</sup> April, 2018.

The main objectives of this orientation visit is

- 1 To study the different type of food service unit. To learn the essential in and out service of food and beverage department.
3. To study the different layout of a kitchen and its unit. 4. To gain practical insights on food production area.

The Department had organized an orientation visit to MCROWN and Heiga which is located at the heart of the City, Shillong. Collectively 10 students and 2 faculty members participated in an orientation visit. The nutrition team left the college premises by 8:30a.m. and reached Shillong at around 10:30a.m. and arrived at MCROWN Hotel at 10:45a.m. On arrival, students were warmly welcomed by the General Manager. He gave a brief description about the Hotel, the amenities and the services they provide. After 10 minutes of detailed sharing the Manager took us to different sections of the hotel.

The students were introduced to different departments like the front office housekeeping, food and beverages and other services in the hotel. During the visitation the students ask many questions related to hotel industry. This was a great experience for the students and a wonderful learning about the system followed in the hospitality industry.

The depth details of this one day visit to MCROWN and Heiga is furnished below:

MCROWN, Shillong's premiere boutique hotel of luxury, placed in the heart of the city. The hotel is situated on the top floor of Marba Hub, the largest and most engaged shopping locals in town. Its multi achievements gives a traveller amongst the rest an unparalleled choice. With leading fashion brands restaurants, gaming and salon parlour the guests are sure to be engulfed. Inspired to fraternize a leisure holidaying and cuisines travelling it is a gateway for a perfect mood setting. Reckons for buoyancy,

MCROWN is your home in the clouds.

MCROWN consist of elegantly designed guest rooms including 5 suites, it is a place of outright luxury and exclusivity. Harmonize with nature, experiencing the world renowned rainfalls of Meghalaya, under the soft roofs of the hotel room for tranquil days and

untroubled nights. AREAS OF STUDY: The Restaurant and the Kitchen

Restaurant: 3 Olives Restaurant An imposing appearance of Mediterranean influence 3 Olives serves you a candid fine dining experience. The restaurant makes room for both open and private affairs with remote control dividers all at the comfort of yourself and yours dear ones. Witness an exquisite panoramic airbrush art work and relish your taste buds at the multi cuisine delight.

The multi cuisine restaurant is comprised of well arranged dining tables in which guest can enjoy imaginative food prepared from the best and freshest local products. The restaurant offers Indian, Chinese, continental and ala'carte menu for lunch and dinner.

The Restaurant constitutes of 12 tables. It has 46 covers and the table is set twice a day (morning and evening). The FB Manager spoke about food service.

These are some of the service he mention 1. Food served by the waiter from a platter to a guest plate is done from the left. Pre plated service is done from the right.

Beverages served from the right.

Soup served from right. . Ladies are always served first and the remaining guest clockwise. 6. Sorted plates cleared from the right. 7. Empty crockery and fresh cutlery served from the right. The Kitchen: The Kitchen is the most important part of the food production area. These are

many areas in the kitchen namely: Production area: where the main preparation of dishes are done in this area. Within this area are the sink, the cooking area and the preparation area for all the four cuisines i.e. the Indian, Chinese, South Indian and the Continental. a). b) Washing area: All the soiled crockery and cutlery are placed and washed here. The clean item are then stored in the shelves. Cold storage: This area store green leafy vegetables and other vegetables. They are stored in a very spacious way. c. Preparation area: This place has a wash area, cutting area and the vegetables are being cut in bulk with the help of vegetable cutting machine and manual equipments. d). e) Bakery section: Here all the bakery items are produced in this section. Here the kitchen is washed two times before and after preparing the major meals. The

kitchen has a good drainage system.

The space and types of equipment available is fully justified. The kitchen has a good lighting facility and exhaust fan to eliminate heat. The Hotels follows standard hygiene and sanitation towards producing any food items to the patron.

## **HEIGA visit by Nutrition Department**

Heiga, located in the heart of the city is a gate way to Shillong. Heiga combines the warmth of old school hospitality with the upgrading of modern amenities to make stay in the hills comfortable and memorable. The location of the hotel keeps close to some of the most famous tourist hotspots of the city. It is only 500 meters away from the famous few kilometers walk Christian Cathedrals as well as the multiple café's and cafeteria in Shillong educational center, Laitumkhrah. The hotel features sound proof rooms and centralized air conditioning to give guest a comfortable and relaxing ambience.

Area of Study: The Kitchen and the Restaurant The Kitchen: The Kitchen is a sub department of food and beverage department concerning mainly with the continental, Chinese and Indian cuisine and South Indian. In the food production cycle this kitchen has 4 counters catering the above cuisine, and in each counters there are three units the preparation area, the sink and the cooking. The kitchen is designed providing the several sections including preparation area, cooking area, storage area, washing area. These sections play a vital role in preparing dishes in order to the acquired recipes offered in the menus. The kitchen is located at the ground floor adjacent to the main store room where the overall sequence of food receiving, storing, preparing, cooking, serving and clearing are properly designed and managed. The kitchen has an easy flow of flow, with no traffic lanes from one section to another. There is maximum use of available area. Equipments used to hold food hot or cold services are positioned near the pantry for quick and easy access by waiters. The kitchen is cleaned and washed three times a day after heavy meals preparation. There is also a good drainage system. The pipeline, electric points and gas connections are well maintained to avoid accidents. There is a good

supply of clean and filtered water.

The Restaurant: Heiga Restaurant offers a unique regional home styling dining experience, prepared with a local touch, the home style cooking ensures that one maintain good health throughout the stay. And at the same time it gives you the opportunity to dabbie in the delicacies. The restaurant has 5 tables with 30 standard types of covers.

Ala Carte Cover Side plate with a side knife, water goblet, fish plate, Fish knife. D'hôte Cover Side plate with side knife, Water goblet, Fish fork and knife, Soup spoon, Dinner knife and fork, Dessert spoon and fork.

Each cover was well balanced with the entire cutlery and other table appointment. The restaurant offers ala carte menu and table d'hôte menu for birthday party or occasion for a group of more than 30 people. English service is mainly practice in this restaurant.

## **Health and Fitness Program by Nutrition Department**

AS per the curriculum the Nutrition Department, Union Christian College. Every year use to arrange a guest lecturer on Health and Fitness for the duration of one week. The session was attended by the IV Semester Nutrition students. In the session Smti. Shem Marweiñ was the resource person of the programme. She briefed and explained the students on the importance of Health and Fitness. She also elaborated with a proper demo which prone to be very beneficial to the students.

## **An Orientation Visit to Nazareth Hospital**

4th An Orientation visit to Nazareth Hospital was arranged for the students of Semester B.A. Nutrition Honours of Union Christian College on the 16h of March 2019.

### **Objectives**

A batch of 6 students with two faculty members had visited the hospitals

The main objectives of this orientation visit

1 To study the dietary department as a whole, its functions and its service activities.

To study the different types of therapeutic diet.

3 To study and learn the different methods of nutrition assessment.

4. To know the functioning of different system in the hospital.

The visitation started at 8:30a.m. from College. We reached the destination around 10:30a.m. At the entrance of the department we were welcomed by the Senior Dietitian Mrs. Ritu. A detailed explanation regarding the dietary department and the importance of Food, Nutrition and Health was given during the visit. This was followed by a detailed presentation about the role of the dietary department, the food distribution, systems, storage and inventory systems and the nutritional assessment methods. The dietitian then took us to different sections, where we had the chance to see the functions being carried out by the staffs of the dietary department. In the end, we visited the different department of the hospitals like ICU, Medicine Female and Male Ward, the Children's Ward, the Maternity Ward and the Burn and Critical Ward. The details of one day orientation visit are mentioned below: Organization and administrative set up of the Institution Nazareth Hospital was started in 1957, as a small dispensary run by a group Spanish Sisters to cater the health needs of the rural population. In 1959-1960 the hospital was extended into few departments: General Medicine, General Surgery, gynecology and Paediatrics. On 1970, the Dietary Department was set up, and in 1987-1988 the management of the hospital was taken over by the Sisters of the Holy Cross. The hospital was further extended having facilities of medicine, surgical private rooms, operation theatres, emergency department, Intensive Care Unit, neurosurgery, ENT, ophthalmology. KRIPA Counseling. Diabetic Clinic and Dietetic internship programme. Bed strength was increased to more than 350 beds.

### **Department Profile**

The Department of Nutrition i.e., the dietary department at Nazareth Hospital was set up in the year 1970. It is a well organized department and is progressive and fully committed to providing the highest quality of nutritional care, food service and education to patients, staffs and students. The department has a staff of 30 full time employees which includes 4 nutrition skilled practitioners, 2 head cook, 10 pantry girls for service both private and general room, 5 utility worker and 6 for cleaning utensils. The department has been in existence for over 49 years and is now providing training experience. Three students are allowed to undergo an internship programme for a period of 3 months and through this programme over hundreds of students are benefitted

#### FUNCTIONING AND OBJECTIVES OF DIETARY DEPARTMENT

The Department aims to provide nutritional care to all the patients: giving nutrition, safe and palatable food while maintaining high standards of hygiene, sanitation production and service to all the food. The dietary department is introduced to all the department in the hospital. The department observed that works were being done systematically and well maintained. A proper sequence of events takes in the department. The work in the kitchen is well organized. The kitchen is clean and the workers too, have knowledge of their work and duty. The dietitians take round ward everyday and monitor the dietary intake of the patients. Nutritional assistance in terms of diet counseling and educational material is given to all patient being charged from the hospital. The dietitians visits all the inpatients on a daily basis to ensure that the food tolerance, ethnic religions needs and therapeutic requirements of all patients are met. The department offer a selective menu for patients without dietary restriction, whereon patients with dietary restriction will be offered a non select menu meals are served to patients three times a day i.e., breakfast, lunch, dinner(major meals).

#### Therapeutic

Diets is concerned with the modification of normal diet to meet the requirement of the patient.

1. To maintain good nutritional status.
2. To correct
3. To afford rest to the whole body or to certain organs that may be affected.
4. Adjust the food intake to the body's ability to metabolize nutrients.
5. To bring about change in the body's weight wherever necessary
6. To eliminate particular food constituents to which the patient may be allergic.

#### FUNCTIONING OF DIETARY DEPARTMENT

1. Dietary preparation based on the patient's health status are listed by the doctors of various department which is communicated to dietitians by the nurses.
2. The diet prescription is translated into a well planned menu system keeping in mind the patients other parameters as likes and dislikes, any specific allergy towards particular food restrictions.
3. The menu plan is communicated to the head cook by means of a diet summary prepared by the dietitians who in turn has to translate the menu into a different meal accordingly.
4. The menu is already standardized and the raw weights assessed.
5. The helpers on instruction from the dietitians have to indent the different food items from the stores which is recording a ledger book for proper amounting.
6. The amount of the hospital is responsible for the budget allotted for the purchasing of the food items by the incharge.
7. Purchasing is done on a weekly basis by the incharge.

8. The prepared meals are served by the serving girls.
9. Serving is done according to the meal cards prepared by dietitians.
10. Foods are served directly to the patients at their beds.
11. The quality of food is assessed in terms of temperature, food quality according to disease specification, hygiene etc and follow up is done to determine the acceptability of the food and whether any department moved be required or not.
12. Alterations are made within the menu according to the patients demand and requirement.
- 13 On discharge, the patient receives nutrition counseling along with diet chart and follow up is advised.
14. The dietitian are also actively involved in other enter curricular activities as providing health information on various health issues, conduction nutrition based programmes, offering nutrition counseling, as part of the diabetic clinic and offering nutrition counseling to other patients of the hospital.

FOOD PROCUREMENT, ISSUE AND STORAGE POLICY AND METHODS 1. Employee(s) incharge of purchasing The Supervisor.

2. Purchasing method and schedule of the different food items. Mode: Centralized Method of buying: Wholesale buying Schedule: Vegetables, grocery and fish weekly basis, mutton, chicken as required.
3. Receiving function: The receiving area has an access from the outside for vehicles to enter large volume of commodities are unloaded at a time.
4. Storage: The purchased goods are stored in their respective areas. The Supervisor is responsible for holding change of the store room. Separate rooms are used for dry and cold storage of food items.
5. Issuing: The Supervisor is responsible for issuing the food items. A requisition slip listing the food items needed for the day is handed over to the incharge by the dietitian. Breakfast items such as fruits, eggs etc are issued one day in advance.

#### FOOD PRODUCTION

The dietitian planned the menus according to the patient's requirements. Although there is no provision for general and private ward, cooking area, the preparation of the therapeutic diet are properly checked.

FOOD SERVICE AND DELIVERY . Methods of food service and delivery: It is a centralized method of food service un Meals for different patients are packed according to the meal prepared by the dietitian. It is then carried in trolley's to the different wards from the kitchen whereby they are directly delivered form the kitchen pantry to the patients room. Scheduled (timing for meal distribution)

Breakfast - 7a.m. - 7:30a.m.

Lunch 11:45a.m. -12:15p.m.

Evening tea - 3:00p.m. - 3:30p.m.

Dinner 6:00p.m. - 6:30p.m

## CONCLUSION

It was a great opportunity for students to get an insider's look into the field of clinical nutrition. It gave the students the ability to look at the role of nutrition in health from different angles. They saw how important the dietary department in the weekly outpatient and inpatient, skilled nutrition practitioners were able to make a real difference in outcome as a team. This visitation has broadened our knowledge.

### **The Nutrition Department conducted a 3days training programme in collaboration with the Food and Nutrition Extension Unit, Ministry of Human Resource Development, Government of India on the 20 22h August 2018.**

It was a free training funded by the Food and Nutrition Board, Ministry of Human Resource Development. At the end of the training the trainees received a stipend of Rs.1 100/- each and a Certificate. The training was on Food processing and preservation. Here the students learnt about how to make different types of juices, jams, jellies and also to be able to preserve them for longer duration. They also learnt about how to make candies from Goose berries, ginger etc. Here they also learnt about the Food processing and preservation methods. For instance, the food preservation like pasteurization. Canning, food freezing, food irradiation, drying, fermentation, salt and sugar preservation, chemical preservation etc. Difficult food preservation methods have different impacts on the quality of the food and food systems. Therefore, many processes designed to preserve food involve more than one food preservation method. For example, preserving fruit by turning it into jam, involves boiling (to reduce the fruits moisture content and to kill bacteria), sugaring (to prevent their regrowth) and sealing within an airtight jam (to prevent recontamination). After the programme the students are gaining additional information apart from the daily and regular lectures that they learnt from their classroom.

### **Nutritional assessment and Diet survey the Lower Primary students of the UCC L.P.School**

To determine the nutritional status of an individual we need to evaluate the intake and utilization of different nutrients. But when a child is not growing adequately and he fails to achieve an adequate rate of growth, for instance. Maybe the cause is due to heredity factors, infectious. Lack of dietary intake or any other factor. Hence, evaluating the food intake alone may not give sufficient evidence for judging the nutritional status. For further, there are other procedures as well for assessing nutritional status of an individual. There are four major methods used to assess the nutritional status of individuals include:

- Anthropometric measurement
- Clinical method
- Bio Chemical analysis
- Diet survey

The nutrition students assess the nutritional status of the school children with three of these methods i.e. the anthropometric measurement, the diet survey and clinical method, with the help of our college nurse. Furthermore, the anthropometric measurements simply refers to the measurements of body size. The four most commonly used are simple body measurements like the weight for age, height for age, arm

circumference for age and weight for height. Diet Survey is a way of researching the food consumption of individual groups. Diet method. Food record, diet history, 24 hour recall method and the method that was taken up by the nutrition students is the 24 hour recall Method. The 24 hour recall method is probably the most widely used method of the assessment. Under this method, the subject is asked to recall or describe as much as possible the food intake for the past 24 hours. The individual recalls what was eaten, how much food was eaten, how was the food prepared, when was it eaten and other such details related to food intake. During the survey there were some children who were underweight and nutritional guidance was given to them. The clinical method was also conducted with the help of our College nurse Ms. J. War who worked at the College Dispensary. Here the nurse along with the nutrition students assessed the health status of the Lower Primary School Children and some of them were detected with eye problems and anemia and the nurse gave some medical counseling to them. Thus, by conducting the nutritional assessment the students have learnt and were able to identify some of the risk categories, give nutritional guidance and nutritional intervention. follow ups and in severe cases by referring these cases to medical counseling.

## **The Nutrition Department organized a field trip to Guwahati, Big Bazar**

The Nutrition Department organized a field trip to Guwahati, Big Bazaar on the August 2019, for the Nutrition students to have a market survey on convenience foods, processed foods, perishable, semi perishable and non perishable food items as it is part of the curriculum.

The objective of the trip is to have an insight on the overall market analysis and to study different types of stores that sell good quality products as well as the price index. To check the weight and quantity of the food items. To understand the labels and the expiration dates. To evaluate the wholesomeness of fruits and vegetables, to identify the criteria (quality seasonality, freshness) for selecting fruits and vegetables, to gain knowledge and practical experience in rating the vegetables and fruits surveyed, to detect presence of unwanted substance.

Keeping these objectives in mind, we went to Big Bazaar on the 2<sup>nd</sup> August 2019, to conduct the survey. On evening of the previous day permission was granted by the College authority and allowed the nutrition students with three faculty members to go for the trip. We all assembled at the College Campus at 8 a.m. and left the College. It was a journey of 3-4 hours and reaches the destined place at around noon. On reaching there, we took our students to the Food section area where they were let to do their market survey. The students rated each item based on several characteristics like the appearance, quality, colour, flavour, texture. After rating each item the students had to analyze the whole items by comparing those items with the standard indicators. Standards provide common frames of reference for defining the products. Food standards specify criteria to ensure that products fit the expectation of consumers. This makes useful to consumers. The market survey came to an end at 3p.m. We left the premises at 4p.m.

They also learnt that due to the advancement in the processing technologies there are additional varieties of packaged foods made available to consumers. Instant foods, dehydrated, canned, freeze, dried, part cooked and ready to eat foods has all become familiar nowadays. In addition there is a wide range of ingredients offered in the form of syrups, spices, flavourings, food colours, stabilizers, preservatives etc, to enhance the sensory and keeping quality of food.

Hence, on knowing and understanding the market one can determine the budget by making a daily or weekly buying plan and also to compare the estimated cost of the food products because purchasing foods is the basis for preparing and serving.

This market survey has enhanced the knowledge of students; help them to see the clear picture of the theoretical things they have learnt so far. It is during these surveys that students can actually see and enrich their knowledge and gain better understanding than what is taught or conveyed in the books.

Thus, the market survey was an informative interesting and a successful visit. Most important of all, students can gain new insight into their own field and with understanding it will retain in their mind for longer time.

## BAKERY SCIENCE

Institutional visits are very important as they have enough infrastructures to show case all the real working equipments machinery operational methodology and food and beverages services. Through these visitation students will come across once they enter into professional field after completing their course. These institutions are an effort to bridge the gap of practical exposure.

Objectives:

1. It helps students gain first hand information regarding functioning of the institution.
2. Provides an opportunity to engage in active learning experiences both inside and outside the classroom. .
3. Provides an insight of the real working environment.
4. It fulfills certain curriculum requirements.
5. Helps them to see their future place in the working world.
6. The department focuses on the operational skills skills they have learned, students can start their own business, being the source of f the students so that with these 6. income and employment.

The visitation started by taking all the students to food and production area. Within this premises Ms. Jolene took charge and brief the students regarding food production. She briefed up with the introduction about food production and food beverages services. The recipes, food products they produce are bakery, confectionery, Indian and multi cuisine. She mentioned about every activity happening in the kitchen. She also answered the queries of the students regarding food production and food beverage services.

Students were amazed to see the automated system could work according to the requirements. Later they were brief with the courses provided by the Institute. aking is a science as well as an art and the key to better baking is understanding the core concept of baking. It is considered to be one of the dynamic and innovative culinary techniques used for making bread and confectioneries. Baking is the process of cooking food through dry heat which is usually done in an oven. It is a specialized field which requires a thorough understanding of cooking techniques. Baking demands lots of creativity commitment and passion for food. Baking involves manufacturing of various kinds of cakes, breads, loaves, biscuits, bread rolls, pies, cookies, muffins, pastries etc.

Baking requires a thorough understanding and knowledge. To gain deeper understanding and practical exposure, the department has opted IHM, Mawdiangdiang one of the established baking institutes to conduct a one week programme on Bakery Science for the Nutrition Students.

It was in this one week programme that the students were able to gather valuable information regarding baking principles and techniques, essential baking ingredients, hygiene and sanitation while attending the programme. The baking industrials equipments for the ultimate production of baked goods were also taught. It was in this programme that the students learned how to make a variety of baking products. Having this breadth of knowledge will give the students the best chance to be self employed.

During this programme, students gain an insight into a comprehensive range of commercial baking ovens and bakery equipments designed to meet the specific needs. The students were taught with several techniques of mixing the ingredients well. They eamed how to bake cakes, breads, buns, cookies, patties, pastries, rusk and pizza basea. They were taught how to mould the dough, set the dough to rise and also how to slice and wrapped the final product.

The one week programme takes the students through the key principles of bakery items.

The students had theory classes as well as interactive sessions along with demonstrations.

A one week training programme on Bakery Science and Food Service was done by IM which is their main stream of specialization. A team of 13 students with one faculty member attended the training programme. All the students were excited about the training programme and left the college premises on 19th March, 2019 at 7a.m. by train with the presence of Ms. Barahun Wanjiang the faculty member of Nutrition Department. Every day it was a journey of more than one hour. The journey was comfortable and pleasant. The student reached the

institution around 8:30a.m. As soon as they reached, they were introduced to Mrs. Bala the Head of Department. She briefly and gave up a gist of a one week training programme, giving a detailed description on various aspects they were going to learn.

Date 19.03.19.

Day 1: The first session started with the introduction of baking equipment covering the first unit of Bakery Science. This session was handled by Miss Jenny; she explained the basic concepts of baking equipments. After the theory, she started with the practical making bread loaf and bread roll.

From 1p.m. - 2p.m. Lunch Break.

Theory class with Miss Jenny on the basic concepts of baking equipments.

From 2p.m. - 3p.m.

Theory class with Sir Relest on Bakery Science. the essential of baking ingredients.

From 3p.m. - 4p.m.

Theory class with Miss Maniputi on different types of Kitchen and easy flow of work and work area relationship.

From 4p.m. - 5p.m.

Date 20.03.19. Day 2: With the advent of the new day the excitement level increased amongst the student.

Practical with Miss Jenny. The recipes were Hotdog, Pizza Base and Burger Buns and Patties.

From 9a.m. - 1p.m.

From 1p.m. - 2p.m. Lunch Break.

Miss Jenny gave a detailed explanation on the different types of Kitchen and its activities and food hygiene and sanitation.

From 2p.m. - 3p.m.

From 3p.m. - 4p.m. Theory class on Food Service with Sir Relest.

Date 22.03.19. Day 3: The Students with great interest attended the third session.

Practical with Miss Jenny. The recipes were Coconut Biscuit, Custard Cookies and Choco Chips Cookies

From 9a.m. - 1p.m.

From 1p.m. - 2p.m. Lunch Break.

From 2p.m. - 3p.m. Miss Jenny took theory class on different cooking methods and standardization of all recipes. From 3p.m. - 4p.m. Sir Raju gave a detailed presentation on Food Services and Survey of Food Survey Units.

Date 25.03.19.

Day 4: Everyday the level of excitement to learn new recipes increased amongst the student.

From 9a.m. - 1p.m. Practical class with Miss Jenny. The recipes were Flatters sponge cake, Plain cake, Fruit pound cake, Chocolate cake and Swiss roll.

From 1p.m. - 2p.m. Lunch break.

Sir Raju took practical of types of services stressed on the importance of these services in the hospitality industry.

From 2p.m. - 3p.m.

Miss Jenny took theory class on portion control and uniform

size of each product produced

From 3p.m. - 4p.m.

Date 26.03.19. Day 5: The last session has finally come, the previous session they had a lot of knowledge,

seeking more exposure.

Practical class with Miss Jenny. The recipes were Rusk and Cake Icing.

From 9a.m. - 1p.m.

From 1p.m. - 2p.m. Lunch Break.

The last session was taken by Sir Ashok on Menu Planning and the different types of Menu.

From 2p.m. - 3p.m.

From 3p.m. -4p.m. Theory class on personnel management by Sir Rahul.

The last class was taken by Sir Rajiv on the Essential baking

equipment and types of operation management.

From 4p.m. - 5p.m.

After all the sessions were over, the students did a visit at the institution and explored various departments. From this training programme the students have learnt the concept of Bakery Science, the applications and the service provide by the hospitality industry. This kind of training enhances the technical and practical skills of the students. It is also a fun way to learn, gathered a lot of knowledge and information and hopefully in the long run they can implement it on their own and start up their own business being an entrepreneur.

## Career Oriented Course

The Nutrition Department organized a Career Oriented Course on Food Processing for three months for the students of the College and the duration of the course was from July and ended in the last week of September. 2015. The Participants were 25 in numbers both male and female students.

The main objective of this training was to give the students the overall aspects of Food Processing for entrepreneurship development and to encourage them to establish their own Food Processing Units.

Here they learnt about the definition of Food Processing, utility of food processing/fruits preservation/causes of spoilage-fungi. yeast, bacteria, circumstances of growth of bacteria and enzymes- of decay of fruits/vegetables; bacteria toxicity/contamination, process of organic decay and spoilage prevention, principals of fruit preservation. preservation by sugar - by Chemical preservatives. dehydration drying - freeze drying. by acetic acid. by fermentation and others. Canning of fruits (bottle/can). Jams, Jelly, cundies and canning of vegetables.

The training was funded by UGC; therefore, it was a free training programme for the beneficiaries. At the end of the programme certificates were given to them. Ubjectii es of Fovds dn lvod MaLaagenicL Cercilicate cuur'se. On successful completion of this course, students will be able to: Understand sustainable practices from a culinary standpoint. Identify sources, flavours and uses of various salts, sugars, oils, fats, vinegars, spices, herbs, grains and greens. Identify and use of cooking equipments.

- Understand the Five Taste( Texture, flavor, colour, appearance and taste. )
- Understand the cooking Methods.
- Select Ingredients for a particular dish.
- Prepare different types of dishes.
- Effectively write Recipes.
- Learn Table Setting.
- Set-up his her own Food Counter.

## A visit to ICDS Myllem Block

A visit to ICDS Myllem Block is undertaken with the following

### Objectives

1. To have depth knowledge of the national development programme.
2. to gain practical exposure and insight of the real working environment
3. Gain valuable, real world experience of (ii). working on some of the most challenging development issue, fewed by the world which would substantially compliment their academic learning and provide them an edge to enter the productive work force after the completion of their respective academic preference.

As part of the curriculum, the students need to visit the ICDS Centers. For that, the department has opted Myllem Block for an orientation has seek permission from Directorate of Social Welfare towards taking the students to an orientation visit to Myliem Block. The Social Welfare Department has granted the permission and has fixed 6<sup>th</sup> November, 2015 and an arrangement has been made towards an orientation visit. A team of 12 (12 faculty and 10 students) went to Myllem Block. At first we were introduced to the CDPO Mrs. Juliana Umdor, who gave us a brief introduction about the ICDS Programme and briefing the team with the services they provided. In order to gain a practical exposure and insight of the real working environment the staff of the Myllem Block took us to Angwandi Centre one is 5<sup>th</sup> mile AWC and the other is Nongkseh AWC. Detailed services provided by these centers is furnished below:

1. the Improve the nutritional and health status of children in three age group 0-6 years, pregnant mothers, lactating mothers and adolescent girls (age group 13-18 years).
2. Immunization programme in collaboration with the Health Department, Government of Meghalaya.
3. As day-care centre.
4. Supplementary Nutrition.
5. Periodic Health Checkups, treatment of minor ailments and referral services
6. Growth monitoring
7. Non formal preschool education
8. lhealth/nutrition education to women
9. Safe drinking water

## India and Meghalaya

**Introduction:** India is world's largest democracy with more than 1.2 billion people. It is today one of the fastest growing countries of the world, an emerging power. India is an ancient civilization comprising of high levels of not only physical and spatial diversity but even striking levels of social, cultural, religious and linguistic diversity. Yet, India has a strong underlying unity and identity which makes it stand out as a nation since time immemorial.

Meghalaya is one of the 29 States of India occupying an area of 22,429 Sq.Km. and a population density of 78.5 per Sq.Km. Meghalaya is a State of great scenic beauty with undulating rivers, waterfalls, sparkling mountain streams, emerald green lakes, gorges precipitous ravines and panoramic view from hilltops.

**India ICDS Programme** The ICDS Programme is primarily a child welfare programme. It was started by the government of India in 1975. The ICDS programme has been instrumental in improving the health and wealth of mothers and children under 6 years by providing health and nutrition education, health services, supplementary food and pre-school education. The ICDS national development programme in India is one of the largest welfare programmes in the world. It reaches more than 75 million children aged 0-6 years and 16 million pregnant and lactating mothers across India through a chain of more than 1.2 million Anganwadi Centres (AWCS). The Programme's main aim is to provide nutrition, health and educational services to children before and after birth and through the early childhood period so that their proper physical, mental and social development is ensured.

**OBJECTIVES:** The specific objectives of ICDS are to:

1. improve the nutritional and health status of children in three age groups 0-6 years.
2. lay the foundation for proper, psychological, physical and social development of the child.
3. reduce the incidence of mortality, morbidity, malnutrition and school dropout. ii). achieve effective co-ordination of policy and implementation amongst the various departments to promote child development.
4. enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education.

## Visit to a Hospital Dietary Department NEIGHRIMS

Department of Nutrition, Union Christian College Conducted the Orientation Visit to the Hospital Dietary Department as part of their curriculum for the fulfillment of their practical requirements.

Practical: Group B

Aim: To visit to a Hospital dietary Department

The orientation visit to NEIGHRIMS Hospital was undertaken with the following objectives Dietary Services

1. To understand the functioning of the Dietary
2. To gain knowledge and practical experience in the nutritional management of Various Disorders
3. To gain experience in all aspects of Food Service Management

No of Students: 15

Boys:8

Girls:7

Location: NEIGHRIMS, SHILLONG

Duration: 1 day

As part of the curriculum, the student had to visit the dietary department. NEIGHRIMS which is one of the prestigious hospital in Shillong was opted for an orientation visit. Letter has been draft seeking permission from the higher authorities towards the visit. Based on the approval the date has been fixed and the students went to NEIGHRIMS hospital on the 18th of September 2015. As soon as the students reach the dietary department they were introduced to the Deputy Chief Dietitian The orientation visit started first with the introduction of the dietary department followed by a visit to the various areas of the dietary department. During the orientation the dietician brief the students with the importance of food and nutrition, the roles of a dietician, and the functioning of the dietary department covering the wholes aspect of diet, counseling, storing and sanitation and hygiene Benefits from the study 1. Gives a bird eye view of the dietary department The visit gave the students a deeper understanding of a concept through the act of seeing and doing thus enriching practicing experience that can form the broad basis tor a career in any segment of the fields of dietetics 3. Such visitation provides the students the opportunity to acquire the practical knowledge and abilities offered by the nutrition field and at the same time helps to improve their curriculum

Such visits enhance knowledge and skills and also improve self esteem when students

## Geography Department Curriculum Enrichment Program 2015-2020

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ Date & duration	Number of Participants/beneficiaries		Resource Persons
			Male	Female	
<b>PROJECT: Demographic Scenario and Literacy Pattern of Mawpunkyrtiang and Mawkisyiem villages of Sohra (2016)</b>	Department of Geography, Union Christian College	2015-16	13	8	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

**Introduction :** The Department of Geography is engaged in numerous programmes “Project” where the students are exposed to the different study areas to examine and understand the environmental,socio-cultural economic and demographic phenomenon of the villages in a tribal set up confine mainly to Ri-Bhoi District.In this project a household survey is conducted on a particular village with a sampling of 50 percent of the households.through a structured questioannire containing the objective and subjective questions – (i) Village profile and (ii) Household Survey.In this project the students along with the resource persons are to stay in a particular village for 3 days.

The project undertaken aims at studying the demographic scenario and the literacy patterns of the villages of Mawpunkyrtiang and Mawkisyiem of Sohra town.The study intends to investigate and evaluate the developmental demographic and literacy scenario of the villages.Studies of demographic and literacy patterns is a common feature in India at the macro level.However much work need to be dealt with at the micro level particularly in a tribal setup.The present project aims at fulfilling the desired objectives.

The study area is located at a distance of 74 kms from the college campus.

## Findings

1. A perusal of the population distribution of the study bears testimony of the global pattern of unevenness which tends to get acute as one goes from the micro (Sohra town) to the meso level of Mwpunkyrting ang Mawkisyiem village. The villages had a density of 397 persons per sq.km, higher than the district, state and national average.
2. The age structure i.e., the numbers of people in different age-groups shows that the adult age (15-59) group accounts the highest proportion of 76.49 percent, followed by the young and the aged with the least. The pattern of age structure is a replica of the developing countries particularly the rural areas.
3. The dependency ratio is moderate accounting 79 value.
4. The study area witnessed an increase in the proportion of the elderly with a value of 45.56 index of ageing, higher than the national average.
5. The child sex ratio is highly imbalanced with 717 females per '000' males, while the adult sex ratio is fairly balanced with 1149 females per '000' males.
6. The villages record a high literacy rate of 85.82 percent with a marginal gender gap.
7. The villages witnessed a high net enrollment ratio of 97.46 percent.

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ of	Date & duration	Number of Participants/beneficiaries		Resource Persons
				Male	Female	
<b>PROJECT: Pattern of Rural Livelihood : A Case study of Mawlangwir village.(2017)</b>	Department Geography,Union College	Christian	2016-17	24	16	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

The project undertaken aims at understanding the pattern of rural livelihood of Mawlangwir village.

The area selected for the study falls under Mawkyrwat C& RD Block,which is currently the district head quarter of south-west khasi hills.

#### Findings

1. The village witnessed higher proportion of the working population engaged as daily wage/daily labour/cultivator/farmer.
2. There is an increased in the propotion of marginal workers.
3. Most of the landless workers are engaged in the bigfarmland of the rich farmers as agricultural labour.
4. The rural livelihood is exclusively agrarian where the dominant population depends directly and indirectly on agriculture.

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ of	Date & duration	Number of Participants/beneficiaries		Resource Persons
				Male	Female	
<b>PROJECT: Land Ownership, Land Use Pattern, Forest Diversity and Forest Management : A Case Study of Umsaw Khwan Village (2018)</b>	Department of Geography, Union Christian College		2017-18	24	15	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

The project undertaken aims at studying the relationship between “Land Ownership” pattern and “Forest Resources” in a rural economy of a tribal society. The rural areas in general has within it a distinctive patterns of land ownership of forest which basically depends on the broad pattern of land ownership in existence. The pattern of land ownership of forest has its direct bearing on the level of forest intensity or forest cover and forest resources management.

The study area (Umsaw Khwan) is a village located at a distance of 23kms from Shillong city. It has a total population of 1226 ie., 706 male and 1261 females. This village is located on a crescent shaped slope to the north whereas to the south the slope is generally moderate. The Shillong – U.C.C road follows the contour pattern at the southern face of Umsaw Khwan village.

#### Findings

1. Land Ownership –(a)Community owned Forest land :The only community owned forest is the Law Shnong. (b) Private Owned Forest land (c) State Owned Forest land
2. Land Use Pattern – The present land use pattern of Umsaw village is synonymous with the land use pattern at the district level with the maximum land use still under forest followed by agriculture.
3. Distribution of Forest Resources –Umsaw had only three categories of forest –(i)Reserved Forest (ii) Community Forest and (iii)Private Forest
4. Forest Cover –The forest cover of the village is much more higher than the district aggregate.

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ Date & duration	Number of Participants/beneficiaries		Resource Persons
			Male	Female	
<b>PROJECT: Land Use Pattern and Farming : A Case Study of Umtung Village (2019)</b>	Department Geography, Union Christian College	of 2018-19	24	15	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

The project undertaken intends to investigate and evaluate the pattern of agricultural landuse and levels of agricultural development reflected through the farming practices of the the people of Umtung village.

The study area is located at a distance of 25 kms from the college campus.The village is situated under Raid Umket under hima Khyrim,

Findings –

1. The present land utilization of Umtung village reveals that the maximum land use is inder net sown area ie., 57 percent of the total reporting area much more higher than the district aggregate.
2. The majority of the farmers practice subsistence farming and jhum cultivation.The major crops include rice and maize which accounts 83 percent of the total agricultural crops.The horticultural crops include ginger,turmeric and tomatoes under mixed cropping.
3. About 37 percent of the sampled households are engaged in livestock rearing that include poultry,piggery and cattle.
4. The village had a low proportion of agricultural workforce dominated by the male workers.Most of them are engaged as cultivators and agricultural labours.

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ of	Date & duration	Number of Participants/beneficiaries		Resource Persons
				Male	Female	
PROJECT: <b>Spatial Pattern of Agricultural Practices in Ri-Bhoi District : A Case Study of Umran Dairy</b> (2020)	Department of Geography, Union Christian College		2019-20	30	15	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

The project under investigation aims at studying the pattern of land ownership land utilisation, the spatial pattern of agricultural practices reflected through the farmings types and identifying the major crops ,both food crops and horticultural crops and livestock. One of the challenging task in the study at the micro level is the inquiry into the spatial pattern of farming practices with a unique land ownership and distinctive land use pattern. Therefore, the analysis of the study area aims at fulfilling the desired objectives. Umran Dairy is located at a distance of from the college campus. the village is situated in Raid under Hima Khyrim. The village is located long the NH- 40 , Shillong-Guwahati highway. The village witnessed shift from a traditional rural agrarian economy to a sub-urban village depending on non-agricultural activities.

#### Findings

1. The pattern of land ownership in Umran Dairy is synonymous to the urban scenario of the arrangements of the Khasis to a village in transition from a rural to a sub-urban area. Most of the land are privately owned.
2. The land-use pattern of Umran Dairy exhibit a shift from the agrarian to the non-agrarian economic activity. The land use under agricultural activities is on a downward trend.
3. Among the primary workforce the traditional practices of subsistence farming and jhumming still predominates but recently plantation eclipse the rest of the primary activity.
4. The agricultural crops is dominated by the food crops and plantation crops, the others include the horticultural crops. Though in acreage tea plantation is predominant, yet in terms of production, rice top the list.
5. The institutional support of the RRTC in aiding , facilitating and training in diverse field of agricultural activities is a boon to the rural economy of Umran Dairy.

Item/Title of the Program (Project)	Organising Collaborating Agency	Dept/ Date & duration	Number of Participants/beneficiaries		Resource Persons
			Male	Female	
PROJECT: <b>Cleaning Drive :At Umran Dairy</b> <b>Motto :- “Clean &amp; Green “ as part of 150<sup>th</sup> Birth</b> <b>Celebration of Mahatma Gandhi</b>	Department Geography,Union Christian College	of 2019-20	30	15	Dr.S.Pio Dr.M.C.Daimari Mr.S.L Kharshiing Mr.J.L Nonglait

**Cleaning Drive :At Umran Dairy Motto :- “Clean & Green “**

In order to sensitize about the need of maintaining a healthy environment the Department of Geography conducted a Cleaning Drive with a motto “Clean & Green”,on the 13<sup>th</sup> March 2020.The participants involved in the cleaning drive are the students of the department,the volunteers of the village together with the teachers and members of the local durbar as supervisors of the programme.The entire group work together as a cohesive unit with great enthusiasm and who collectively put the whole hearted effort,sweating themselves tirelessly till the completion of the work.The programme is indeed a great success .Such an extended programme highly commendable,a remark by the Rangbah Shnong.

## **Zoology Department Curriculum Enrichment Program 2015-2020**

A curriculum enrichment programme was organized by the Department of Zoology on the **26<sup>th</sup> of November 2015**. In this programme a faculty from the Department of Environmental Studies, North Eastern Hill University, Prof. Dibyendu Paul was invited to deliver a lecture. The topic of his lecture was Contemporary issues in Environmental Science. The lecture was attended by all the science students (B.Sc. 2<sup>nd</sup> semester, B.Sc. 2<sup>nd</sup> year and B.Sc. 3<sup>rd</sup> year), and faculty members from the department of Zoology and Botany. The lecture deliberated on important environmental issues like the human population, the depletion of natural resources through overexploitation, the degradation of natural resources and ecosystem services through pollution etc., particularly with reference to the third world countries and the North East, and the possible interventions to mitigate the problems. Questionnaires were distributed to students after the lecture to get their feedback.

### **UNION CHRISTIAN COLLEGE**

Department of Zoology

### **Curriculum Enrichment Programme**

#### **Lecture Series**

Lecture -I

**Resource Person : Prof. Dibyendu Paul, Department of Environmental Studies, North Eastern Hill University, Shillong.**

**Topic : “Contemporary Issues in Environmental Science”**

**Date : 26/11/2015**

**Time : 11.30 AM – 1.30PM**

**Venue : Digital Laboratory, Department of Zoology, Science Building.**

#### **PROGRAMME**

- 11.30 AM- 11.40AM : Welcome address and Introduction of the Resource Person by  
Mrs. Amesha B. Lyndem.
- 11.40 AM- 1.00 PM : Lecture by Prof. D. Paul
- 1.00 PM – 1.20 PM : Interactive Session
- 1.20 PM -1.25 PM : Vote of Thanks by Ms. Riviana Thabah
- 1.25 PM – 1.30 PM : Collection of Student’s Feedback and Attendance.



### **Training on Apiculture (Bee Keeping):**

A training on Apiculture was organized by the RUSA Cell and the Department of Zoology in collaboration with Regional Research and Training Center (RRTC), Umran on the **24<sup>th</sup> March 2018**. The students and teachers of Zoology Department actively took part in the theory and practical training given by an expert Mr. Joseph Basumatary from RRTC.



## Field Trips Report (2015-2020):

Field trips are conducted every year by the Department of Zoology for the final year students, as part of the course curriculum.

The basic objective and purpose of conducting such field trips is to get a 'first hand' observation and gain knowledge on various aspects of Zoology, to meet the subject on intimate terms and to test the theories in the field.

These study tours help the students immensely to understand the importance and critical interrelationships of nature. Most importantly, the evidence visualized in the field condition helps them to grasp the knowledge of the subject as taught in theory classes.

Field trips also benefit teachers in addition to students. Field trips bring attention the type of activities that generate excitement in their students and can be replicated in the classroom. The information and knowledge perceived during the field trips adds to the lesson plan and helps the teacher come up with new ideas for instruction. Teachers can also assign work to supplement the field trips to ensure that students understand the lesson.

Over the last five years, the students of Zoology Department had visited various places in Assam and Meghalaya as listed below:

YEAR	DATE	PLACEVISITED
2015 Batch	5 <sup>th</sup> . Oct. 2015	Regional Research Training Center, Umran And Sericulture Farm, Nongpoh
2016 Batch	25 <sup>th</sup> .Oct. 2016	Regional Research Training Center, Umran And Sericulture Farm, Nongpoh
2017 Batch	27 <sup>th</sup> -28 <sup>th</sup> April 2018	Kaziranga National Orchid And Bio-diversity Park, Kaziranga, Assam
2018 Batch	1 <sup>st</sup> Dec. 2018	Assam State Zoo, Guwahati, Assam

**Dr. Mayeshree Talk :**

The students and teachers of the Department attended a student's enrichment programme organized by Botany department on the **30th November,2016**. Dr.Mayeshree Syiem the Resource Person, spoke on the "*Environment, pollution, bioremediation and related glossary of Environmental Sciences*"



**The Science Society**, Union Christian College organized a one-day Inter-Class Seminar on the **7<sup>th</sup> September 2017**, where three students from each Department took part. The Zoology Department is contented to have two meritorious students in which Ms. Sweety Megu was presented with the Best Speaker and Gyati Hassang was awarded 1<sup>st</sup> Prize

**Inter – School ScienceExhibition:** UCC Science Society organized a one-day Inter-School Science Exhibition on the **3<sup>rd</sup>September 2019** where a number of schools in and around the area participated. The studentsand the faculty members of the Department were enthusiastically involved in the programmein which Ms. I. Turnia and Mrs. R. Thabah were the judges of the exhibition.

## **Botany Department Curriculum Enrichment Program 2015-2020**

### **Mushroom Cultivation**

Department of Botany, Union Christian College / Rural Research & Training Centre (RRTC), Umran

30th September – 25th October, 2019 / 26 Days

Mr. Joseph Basumatary

This short-term vocational training programme, being one of the aid-on courses, has been given to the students, as sponsored by the Ministry of Human resource Development (MHRD) under RUSA 1.0 Equity Initiative Programmes, in collaboration with Rural Research & Training Centre (RRTC), Umran, one of the nearest training centers. The target groups of students have been given the theoretical information and knowledge through a series of classes within the department, followed by giving training and skills required for growing mushroom to the point of packaging as end products, to encourage the participants as an alternative for their employability and entrepreneurship in the field. The end product, being rich in protein and much priced delicacy, is a viable alternative add-on required skills for the participants, even as they pursue their under-graduate programme in the college, thereby raising the probability of their employability as well. This training programme is being funded by the MHRD under the scheme RUSA Equity Programme, and so the fees were waived from the participants, and given them free of costs. After completing the training programme, the basic objective of giving them the required skills and certificate as a document proof, to avail financial resources from various different schemes from the Union Government as well the State, and other sources, have been achieved. The programme also has equipped them with the required expertise lest they suffer in their future venture in small scale/micro entrepreneurships or cottage industries, as one of their revenue sources

## Mushroom Cultivation

Department of Botany, Union Christian College / ICAR, Umiam

28th November – 8th December , 2017/ 14 Days

Dr. Pankaj Baiswal, Sr Scientist, ICAR, Umiam

A two-week long training was conducted where, Dr. Pankaj Baiswal, a Senior Scientist, has trained the students along with two participants from the adjoining village, as an add-on course. It was sponsored by the Ministry of Human Resource Development (MHRD) under RUSA 1.0 Equity Initiative Programmes, in collaboration with Indian Council of Agriculture Research (ICAR), Umiam. The participants were given the theoretical information, knowledge and skills needed, through a series of theory classes, subsequently followed by training and skills development for growing mushroom, to encourage the participants as an alternative means for their employability and entrepreneurship in the field. The end product, being rich in protein and much priced delicacy, is a viable alternative add-on required skills for the participants, even as they pursue their under-graduate programme in the college. This training programme was funded by the MHRD under the scheme RUSA Equity Programme. It was therefore given them free of costs. After completing the training programme, the basic objective of giving them the required skills and certificate as a document proof, to avail financial resources from various different schemes from the Union Government as well the State, and other sources, have been achieved. The programme also has equipped them with the required expertise to start their own small scale/micro entrepreneurs or cottage industries, to enable them as an alternative source of income.

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Invited lecture Title...Environment,Pollution,Bioremediation and related glossary on Environmental Science		30th November 2016 (One day)			Prof.M.B.Syiem Dept of Biochemistry North Eastern Hill University.
	Botany Dept/ Enrichment program of RUSA UCC		48(total)		
Program Outcomes: (Maximum 500 Words)					
The Dept of botany had been inviting eminent scholars to deliver lectures on diverse topics for the benefit of our students.one such talk was organised by the dept as part of enrichment activity of RUSA,UCC. Prof M.B.Syiem from NEHU had a talk where she highlighted various aspects of environment.The lecture created a deep awareness on the serious deterioration of environment .Through the lecture she also emphasized on the importance of latest methods of clearing of pollutants from environment. The students got an opportunity to interact with the speaker and clear their doubt on varied issues associated with environmental studies. For many students it also gave opportunity and idea for taking up research projects in the field environmental studies in their course of higher study. Above all the invited talks conducted in the dept exposes students further with new knowledge and terminology.					

## **Full Bright Specialist Programme / Land use Planning and Management and Development – Need Assessment, Surveys and Institutional/Programmatic Research**

Department of Botany, Union Christian College / United States Department of Agriculture, Forth Valley Experimental Forest, Rocky Mountain

8th February – 1st March, 2017 / 21 Days

Dr. Warren Keith Moser

This 21-day programme was launched with an objective to use and manage the available land for agro-forestry and horticulture purposes, and establish scientific researchbased plantations of *Pinus kesiya* of high wood density within the campus. While the short-term agro-forestry research is being carried out, the final year Botany Honours students were given certain fundamental skills of forestry and soil sciences. Concomitantly, the probable areas for potential crops were mapped and after carrying out the study, the need to thin out the dense multi-aged pine trees for density adjustment to accommodate different crops and timelines are recommended. Given the relatively small size of the sites under study, removal of pine needles to mitigate the low soil pH and their allelopathic effect on other species are done. Small size of the tracts lends itself to evaluating soil treatments such as carbon and fiber enhancement (e.g. manure) or adding lime or some other agricultural alkali to adjust the soil pH. Continued incorporation of annual crops' post-harvest residue into soil for potential improvement of soil structure and chemistry, at least at the surface were recommended, ensuring that the root systems of the overstory trees are not damaged. Another area of research for setting up a plantation of *Pinus kesiya* of higher wood density would be primarily to core the trees or by following NDT (non-destructive-testing), to identify the trees with higher wood density which would result in adding great value to it. Every effort must be made to establish the co-relation between wood quality characteristics and factors related to site, genetics and stand dynamics (e.g., age, density). Visits were also made to other adjoining areas of pine forests in Jaintia Hills for the study. While these studies were being carried out, the under-graduate students were taught in various different teaching sessions and given first-hand practical skills in agro-forestry and soil sciences. Besides, fundamental applied ecology were being taught by the fullbright specialist during the programme.

## **Chemistry Department Curriculum Enrichment Program 2015-2020**

*A BRIEF REPORT FROM THE DEPARTMENT OF CHEMISTRY ON THE VISIT TO PARTICIPATE ON THE PLATINUM JUBILEE CELEBRATION OF THE DEPARTMENT OF CHEMISTRY, ST. ANTHONY'S COLLEGE, SHILLONG.*

We the students of Chemistry Department of U.C.C took part in the Platinum Jubilee celebration of the Department of Chemistry of St. Anthony's College on 14th November 2015 at Shillong. The program was an Inter-College Students' Chemistry Seminar.

The following five of us visited the St. Anthony's College:

1. R.Vanlalmangaihi. B.Sc. III Year (Chemistry Hons)
2. Soreipam M. Abonmai. B.Sc. III Year (Chemistry Hons)

3. Alina Pertin. B.Sc. III Year (Chemistry Hons)

4. Mini Loya. B.Sc. III Year (Chemistry Hons)

5. Suchali Manpang. B.Sc. III Year (Chemistry Hons)

Our teachers, Dr. Cornelia M. Lyngdoh and Mrs. H. Shangpliang were already present there.

The seminar began with a welcome speech from Dr. Manash Das Gupta HOD, Chemistry Dept. of St. Anthony's College. The seminar was chaired by HOD, Chemistry Dept. of Shillong College. In the Students' Seminar there were total of 12 presenters, 2 each from 6 colleges present. The colleges present were:-

1. St. Anthony's College. 2. St. Mary's College. 3. Union Christian College. 4. Shillong College.

5. Lady Keane College. 6. Sankerdev College.

We the presenters from our Chemistry Dept. U.C.C presented the following papers:

1. Soreipam M. Abonmai – “ A study on Psychoactive Drugs with special reference to Caffeine”. 2. R. Vanlalmangaihi – “ Food Adulteration and It's Chemistry”.

After the seminar, an invaluable presentation was there from the Guest Lecturer, Dr. Sonali Saha from Touru College, Miami, Florida USA. The Students' Seminar was a very useful one for us as we get the opportunity to meet students from different colleges and interact with them and the teachers as well. The topics presented were very informative and innovative ones. I, on behalf of the students of B.Sc.III year Chemistry Hons. thank Dr. Ashish Malhotra HOD, Chemistry Dept. U.C.C for all the briefing up for the presentations and the teachers Dr. R. M. Manih, Dr. Cornelia M. Lyngdoh and Mrs. H. Shangpliang for their untiring support and love and advice. With this type of seminar we get to brighten our knowledge and I hope this continue on in the coming years.

### **National Science Day at Sankerdev College**

The “ National Science Day” programme was held on 28th February 2020 in Sankardev College, Shillong organized by the Department of Physics, Sankardev College, Shillong. The students who participated were Debojit Roy (Chemistry Hons), Ghana kanta Bora (Chemistry Hons), Harison Pohlong (Physics Hons ), Elibrest Lymphuid (Physics Hons ) and the Associated Teacher who accompanied them was Mr P. Syndai. The programme began with the registration, welcome address by the Principal, Sankardev, College. There was a popular talk by Prof. K.Ismail Retd, Dean of the school of Physical Sciences, NEHU, Shillong. In the programme, the students got to know about the great scientist C.V,Raman and his achievements which inspired them to a great extent. There was a short tea break and after the tea break there was a Quiz Competition followed by Prize distribution, vote of thanks and lunch. All the participants were given certificate of participation.

## Political Science Department Curriculum Enrichment Program 2015-2020

### Legal Literacy Programme

The Department of Political Science organised a Legal Literacy Programme on 28<sup>th</sup> September 2015 in collaboration with the District Legal Service Authority, RiBhoi District, Nongpoh.

Dated: 28<sup>th</sup> September 2015

No. of Participants: 97

Resource persons: Members of Legal Cell, RiBhoi District, Meghalaya.

### OBJECTIVES OF THE LEGAL AWARENESS PROGRAMME

- i. To impart practical knowledge about the basic legal rights and remedies provided under various women related laws, thereby making them fit to face the challenges in real life situations.
- ii. To create awareness about the various machineries/organs of the Justice delivery System available for redressal of their problems/grievances.

## Education Department Curriculum Enrichment Program 2015-2020

Item/Title of the Program	Organising Dept/ Collaborating Agency	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
1. Excursion to Sohra	Education Dept	1. 12.04.2018 / One Day	1. 8	1. 24	
2. Educational Tour to Don Bosco Museum, Mawlai		2. 22.03.2019/ One Day	2. 11	2. 17	
3. Study tour to Umsaw .L.P. School, Umsaw		3. 26.09.2019/ One Day	3. 4	3. 17	
4. Extempore Speech on the occasion of 150 <sup>th</sup> Birth Anniversary of Mahatma Gandhi		4. 15. 11.2019/ One Day	4. 11	4. 17	
Program Outcomes: (Maximum 500 Words)					

### Task 1 : Excursion to Sohra

The Department of Education organized an excursion to Sohra on the 12<sup>th</sup> April, 2018 for the Final Semester Students (6<sup>th</sup> Semester). The purpose of this trip was to promote and enhance knowledge to the students beyond the four walls of the classroom so as to foster a spirit of curiosity and creativity among the students.

The day was a productive and wonderful experience where the students learned about the topography, physical and cultural riches of the Khasi people. It was a complete and knowledgeable trip.



Task 2: Educational Tour to Don Bosco Museum, Mawlai

An educational tour was also conducted by the Department on the 22<sup>nd</sup> March, 2019 for the students of the 6<sup>th</sup> semester. The trip began with a lot of enthusiasm and vigour.

The students were inquisitive and enthusiastic and learned a lot not just about the local indigenous people and culture with tools and clothing and artifacts on display. They also interacted with the museum personnel to understand the interesting history behind each piece of artifacts collected.



Task 3 : Study Tour to Umsaw .L.P.Govt School, Umsaw

Another study tour was conducted by the Department of Education on the 26<sup>th</sup> September, 2019 for the students of the 5<sup>th</sup> Semester.

The student learned about the SSA aided school which offer free education to the lower primary students along with nutritious and healthy mid-day meals which are given to all the students.



Task 4 : Extempore Speech

An extempore speech competition was organized by the Education Department on the occasion of the 150<sup>th</sup> Death Anniversary of Mahatma Gandhi, the father of the Nation on the 15<sup>th</sup> November, 2019 for the 1<sup>st</sup>, 3<sup>rd</sup> and 5<sup>th</sup> semester students.

The number of students who had participated were 5 male and 4 female students. They all had something different and similar to share about the great leader and philosopher, Mahatma Gandhi. The first prize goes to Esther C Vanlalbiakdiki, the second to Alex Keakong and the third to LetgouhaoHaokip. to



## Curriculum Enrichment Program organized by the College in the form of Orientation for the session 2015-2020



DISPENSARY  
UNION CHRISTIAN COLLEGE  
UMIAM KHWAN, RI-BHOI, MEGHALAYA-793122

MEDICAL ORIENTATION

Date: 15<sup>th</sup> July, 2016

**Students** are to take note of the following for their own **wellbeing**:

1. Any student with past medical history or/and ongoing long-term medication are requested to kindly inform and consult the medical personnel of the College Dispensary, with all available medical documents.
2. Any chronic case, that entails a referral for further medical investigation/treatment elsewhere, should be informed at-least **3-4 days** in *advance* for proper arrangement.
3. **Dispensary Timing**  
Monday - Friday  
10:30 AM – 4:30 PM (LUNCH BREAK 1:00 PM – 2:30 PM)  
  
**Dr. Wilbur Manners** 10:00 AM – 1:00 PM  
Saturday & Sunday (EMERGENCY cases)
4. Dispensary medical personnel can be reached by phone, for medical emergencies.
5. Any-one willing to go for further treatment elsewhere, in consultation and due **approval** from their own **parent(s)**, should go through proper channel.
6. Girl students are advised **not** to *skip* their **breakfasts** and attend their regular classes on **empty stomach**.
7. All medical cases, after proper check-up and reviews, must be reported back with adequate medical documents.

**UNION CHRISTIAN COLLEGE**  
**Umiam Khwan, Ri-Bhoi, Meghalaya-793122**  
**Students' Orientation Programme 2018**

**Date: 30<sup>th</sup> June, 2018**

**Chairperson – Dr. R.M. Manih, Principal, UCC**

**Agenda:**

1. Welcome address from the Chair
2. General Rules and Regulations of the College
3. Class Routine
4. Elective Subject Combinations
5. Examinations Matters
6. Anti-Ragging
7. Library Book Fair / Orientation Programme
8. Value System within the Institution amongst the students
9. Conclusion

Date: 1<sup>st</sup> July, 2019

**IMPORTANT NOTIFICATION**

This is to inform ALL the **FIRST SEMESTER STUDENTS** that there will be an **ORIENTATION PROGRAMME**, on the **5<sup>th</sup> of July 2019 (FRIDAY)** at 1:00 PM at Ist Semester Hall near the College Chapel.

All FIRST SEMESTER STUDENTS are to attend the said programme on time **WITHOUT FAIL**.

Students are to come prepared with their functional :

- email ID
- Mobile Number and
- Correct blood group.
- **Students' Attendance attending the programme will be taken.**
- **Any student missing the programme, without any prior written permission from the Principal, will be called for EXPLANATION by the undersigned.**

**ORIENTATION PROGRAMME**

DATE : 5<sup>TH</sup> JULY, 2019

TIME : 1:00 PM

VENUE : Ist SEMESTER HALL, near College Chapel

Dr. R.M. Manih

Principal

## PROGRAM REPORT

## PEFORMA VII

Item/Title of the Program	Organising Dept	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Field Trip – Study of vegetation in Mawlynongh & Amlarem	Department of Botany, Union Christian College	7 <sup>th</sup> September, 2018 /One Day 11 <sup>th</sup> October, 2019 / One Day	21 20	25 22	Department Faculty

**Program Outcomes:** (Maximum 500 Words)

Mawlynong is a village in the East Khasi hills district of Meghalaya. It is located 90 kms from Shillong, along the India-Bangladesh border. It is notable for its cleanliness. Farming and cultivating broomsticks made from locally grown soft grass, bay leaves, pepper, honey, betel nut, oranges and pineapples is a major occupation and important source of living. Often inundated with heavy rainfall, the natural vegetation flourishes with abundant foliage. On the way to Mawlynong lies the Living Root Bridge, among the most wonderful sights on Earth. The bridge was created by the local people over a period of 10-15 years on Indian rubber tree i.e., *Ficus elastica* by making the roots grow across a river.

The common tree species found are *Ficus elastic*, *Engelhardtia spicata*, *Echinocarpus dasycarpus* *Syzygium spp.*, *Castanopsis indica*, *Castanopsis spp.*, *Drimycarpus racemosus*, *Elaeocarpus lanceaefolius*, *Machilus spp*, *Schima khasiana*, *Quercus spp.*, *Cinnamomum obtusifolium*, *C. tamala*, *Garcinia amonola*, *Acer laevigatum*, *Myrica esculenta* *Zanthoxylum ovalifolium* etc.

Amlarem is located in the West Jaintia Hills District of the state of Meghalaya.

The vegetation cover in the area is predominantly with mixed miscellaneous forest. The common species are: *Quercus spp.*, *Castanopsis spp.*, *Michelus spp.*, *Betula anoides*, *Schima Wallichii*, *Myrica negre*, *Carpinus Mancany spp.* The prevalent creepers are *Holbocilia latifolia*, *Embelia floribenda*, *Celastone feniculate*.



**Photo Plate 01:** Participating students with Faculty Staff



**Photo Plate 02:** Double Decker living bridge - Mawlynong



**Photo Plate 03:** Broad-leaved forest in Amlarem

## PROGRAM REPORT

## PEFORMA VII

Item/Title of the Program	Organising Dept	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Field Trip – <b>Study of vegetation and landscape in Laitlum, an important iron smelting site in East Khasi Hills</b>	Department of Botany, Union Christian College	5 <sup>th</sup> November, 2016 / One Day	14 students 1 Faculty and 1 Lab Assistant	20 students 3 Faculty staff	Faculty of the Department, UCC

**Program Outcomes:** (Maximum 500 Words)

Laitlum, a part of Smit area in East Khasi Hills, well known for the remnants of ancient iron-smelting, is chosen as a study site. The study site is located along the southern slope of the central highland of the state of Meghalaya. One of the main objectives of the study was to visit the site to witness the visible landscape that is closely co-related to the practice of primitive iron smelting in the area, where most of the stretches were severely eroded and overgrown by grass. Only the small patches of broadleaved hill forest below the study site were seen, which were protected through the ages by the people for religious and cultural reasons. These patches of forests represent the primary forests, which once have been dominant in much larger areas. The remnants of iron smelting, which once was a very common economic source of the people, were witnessed in the form of iron slag, which are commonly found underneath the soil in some stretches in Laitlum. The area is part of the main centre of the former iron-ore excavation. The upper portion of the soil, a few centimeters below, still has deposits containing charcoal and iron slag ranging between 1–10 cm in diameter. Literature suggest that the charcoal extracted from such layers were dated 245-25 years BP. Such abundant slags were observed commonly in the study site. One of the factors responsible for vast tracks of grassland in the entire southern slope of the Khasi Hills, despite having remnants of primary forests represented and well preserved till today by sacred groves, could have been due to large scale demand of fuel used for smelting, which was met primarily by charcoal produced from local tree species, especially local oak species. However, in cases where there was a lack of a hardwood, other kinds of tree species were used for carbonization. The demand for charcoal was perhaps met by large scale felling of trees, resulting in vast clearing of forests, which latter, due to steep terrain coupled with high precipitation led to loss of primary forests to an extent that the regeneration time of most species could not have been there, leading to the areas now converted to grassland, the landscape which is very common today. The students had a first-hand experience and could observed such significant historical remnants during the study, which had supplemented them the information they were taught with required knowledge and had given them the sense how closely our activities could lead to such change in landscape and our environment



**Photo Plate 01:** Iron slag found in the study site in Laitlum



**Photo Plate 02:** Steep slope terrain of the study site, overlooking some few stretches of primary forests near the human settlements

## PROGRAM REPORT

## PEFORMA VII

Item/Title of the Program	Organising Dept	Date & duration	Number of Participants/beneficiaries		Resource Person
			Male	Female	
Field Study – <b>Study on <i>Hevea brasilienses</i> &amp; <i>Shorea robusta</i> economically important trees in Nongpoh, Ri-Bhoi District</b>	Department of Botany, Union Christian College	8 <sup>th</sup> September 2017 /One Day	15 – Students 1- Faculty 1- Lab Asst	24 – Students 3 – Faculty	Department Faculty

**Program Outcomes:** (Maximum 500 Words)

The study trip was made to Nongpoh, Ri-Bhoi, where rubber, sal and teak plantations were chosen as a study sites

The deciduous rubber trees, *Hevea brasiliensis* belonging to the family Euphorbiaceae, which is characterised by presence of milky latex, having three carpel, compound leaves and other characters were closely studied from the standing trees. The trees were found to be approximately 20-25 meters tall, perhaps the vertical growth were restricted due to the altitude of the area, relatively shorter than usual heights. The leaves were found to be compound with three leaflets and entire margin. The fruits have three seeds, implying its tricarpeal nature of gynoecium. The inter-space of the trees were roughly 6X3 meters. The matured cylindrical tree boles were found chiselled down the trunk, where the latex that comes out from the bark was collected properly into conical carbon-fibre vessels, tied to the tree trunks. The milky viscous latex was collected into jars, which were then sent for processing.

Sal, *Shorea robusta*, belonging to the family Dipterocarpaceae, an important timber yielding tree species were studied from a private plantation. It is one of the most important sources of hardwood timber. The young trees were characterised by smooth bark, while the matured ones, reaching about 30-35 meters in height, were characterised with cracked bark. Their leaves were simple, entire, glossy and glabrous, while the 1.5 cm fruits were characterised with three wings.

The students were given practical lessons of the above two important tree species, as part of their curriculum.



**Photo Plate 01:** Collection of latex in a conical vessel in one of the rubber trees



**Photo Plate 02:** Students, while trekking through *Shorea robusta* (sal) plantation in Nongpoh