

MINUTES OF THE MEETING HELD ON 5<sup>th</sup> MARCH, 2020

Members attended:

Dr. S. M Kharbuli

Dr. R. N Bhuyan

Dr. R. Nath

Ms. E. Wanniang

AGENDA DISCUSSED:

- Discussion on the Departmental budget for the academic year 2020-2021.
- Course allotment to the respective teachers
- Dissertations from other Universities.
- Discussion on add-on courses

The meeting was chaired by the HoD, Dr. S.M.B Kharbuli. The chairperson welcomed members present in the meeting and appraised them on the Departmental matters and asked for suggestions from the members.

The agenda circulated was discussed and the following decisions taken thereon.

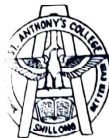
1. With regard to departmental budget Chairperson asked the members to prepare the requirements to be included in the 2020-21 budgets.
2. With regard to the course allotment discussion was done thoroughly and courses were allotted to the faculties. Chairperson urges upon faculties to complete syllabus within stipulated time.
3. It was informed by the chairperson that students from other universities are coming to Fishery science department for their PG dissertation. It was decided that the department prepare guidelines for formalities involved for the students concerned.
4. Allotment of responsibilities was given to the non-teaching staff regarding hatchery, aquarium maintenance and overall maintenance of the department.
5. With regard to the add-on courses the Department has decided to conduct a short term course for 30 hours on Scientific Farming with respect to hilly regions and the tentative dates was decided from April to May 2020. The chairperson has entrusted Dr. R. Nath to be the co-ordinator and to do the needful.

The meeting was ended with vote of thanks by chairperson.

Head  
Deptt. of Fishery Science  
St. Anthony's College  
Shillong

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## DEPARTMENT OF FISHERY SCIENCE



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Dr. Sarah. M.B Kharbuli, Ph. D  
Head of the Department

To,

Principal  
St Anthony's College, Shillong-793001

Subject: Syllabus preparation for the Short Term Course/Add-on Course on  
**'Scientific Fish Farming in the Hilly Region'**.

Ref. Minutes of the Departmental meeting held on the 5<sup>th</sup> March 2020.

Dear Sir,

With reference to the subject cited above and the departmental meeting held on 5<sup>th</sup> March 2020, I would like to inform you that the Department of Fishery Science, St. Anthony's College, Shillong, will be conducting a Short Term Course/Add on Course on **Scientific Fish Farming in the Hilly Region**.

In connection to the above, the department has entrusted Dr. Rupak Nath, course coordinator to prepare the syllabus for the above mentioned course and submit the same to the Head of Department for the necessary action.

Dated: 06/03/2020

Sincerely,

( Dr S.M.B Kharbuli)

Head  
Deptt. of Fishery Science  
St. Anthony's College  
Shillong

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*Culture Fishes for Health & Riches*

**DEPARTMENT OF FISHERY SCIENCE**

ST. ANTHONY'S COLLEGE, SHILLONG-793001

**SHORT TERM CERTIFICATE COURSE IN**

**'SCIENTIFIC FISH FARMING IN THE HILLY REGION'**

Sl. no	Heading	Particulars
1	Title of the course	Short Term Certificate course in <b>'Scientific fish farming in the Hilly Region'</b>
2	Eligibility for Admission	STC - Degree Level in B.A. / B. Sc / B. Com/others will be covered <b>First come first served basis</b>
3	Medium of instruction	English
4	Duration	1 months
5	Credit hour	
	Theory: Course code STCC-SFF-T- 02)	25
	Practical cum Field visit: Course code STCC-SFF-P- 02)	5
	<b>Total credit hour</b>	<b>30</b>
6	To be implemented from	2021
7	Number of students/batch	25
8	Attendance required	90% lectures
	Field visit	Compulsory
9	Modality of Assessment (50 marks)	1. Objective type questions: 50 marks

## CONTENTS

1. Objectives
2. Fee structure
3. Topics, credits, assessments and workloads

### (1) Objectives of the Course

- i) To inculcate importance of scientific fish farming in relation with entrepreneurship development
- ii) To motivate students to take up fish farming as an income generating venture
- iii) To impart knowledge about fish grow out technology and its marketing
- iv) To increase fish production in the state and country as whole

### (2) Fee structure

Name of the Course	Tuition fee	Laboratory Fee	Total fee
Short Term Certificate course in 'Scientific fish farming in the Hilly Regions'	1500	1000	3000.00

### (3) Topics, credits, assessment and workload

- i) Theory syllabus for certificate course in Scientific Fish Farming Scientific fish farming in the Hilly Region (Course code: - STCC-SFF-T- 02)
- ii) Practical syllabus for certificate course in Scientific Fish Farming Scientific fish farming in the Hilly Region (Course code: STCC-SFF-P-02)

**Department of Fishery Science**  
**St Anthony's College, Shillong-793001**  
**Syllabus of Short Term Course**  
**'Scientific fish farming in the Hilly Region'**

**(a) Theory:**

Unit	Topic	Credit	Lecture/week
<b>Unit-I</b> Concept of Fish Farming	Importance of Fish farming in livelihood and nutritional security, Fish farming as a business Enterprise: Present Fish production, its trend, consumption level, demand, comparison with other farming system and profitability of fish farming. Scope of Fish Farming in the North East Region of India. An Introduction to Fishes (Taxonomy, Systematics, Species and Species Concept. Classification of fishes)	4	4
<b>Unit-II</b> Construction of Fish Farm	Site selection for construction of Fish farm (Criteria of site selection, soil and water characteristics. Different types of Fish ponds and its design ( Construction of fish farm: Nursery, rearing and stocking ponds)	4	4
<b>Unit- III</b> Composite Fish farming	Pond ecosystem and principle of Composite Fish Farming (Pond preparation ( Aquatic weeds and their control) fertilization, liming, species selection, combination ratio, stocking density, feeding and harvesting), Annual work calendar and Economics of Composite Fish farming	4	4
<b>Unit-IV</b> Fish Nutrition and Water Quality Management	Importance of Natural food in fish pond, Types of supplementary feed and methods of feeding, Importance of water quality management in Fish farm: Role of dissolved oxygen, Carbon di-oxide, total alkalinity, Total hardness, pH in fish production and its management. Effect of algal bloom in fish pond.	4	4

<b>Unit-V</b> Integrated Fish Farming	Principles of integrated farming and its prospects in NE India, Advantages of integrated farming, Pig cum Fish Farming, Poultry cum fish farming, Duck cum Fish farming, Rice cum fish farming,	4	4
<b>Unit- VI</b> Fish Diseases and Fish Preservation methods	Important fish diseases: Interaction between host, environment and pathogens, important Bacterial diseases, symptoms and their control measures, Parasitic diseases : Argulosis, Lernaeasis, Gyrodactylus and Dactylogyrus infection, fungal infection and its control, Environmental diseases, Different types of methods of treatment and calculation of doses		4
<b>Unit-VII</b> Fish spoilage and Marketing	Fish spoilage: Cause of fish spoilage, Rigor mortis, Chemical, Enzymatic and bacterial spoilage, Fish preservation methods with reference to icing, Fish marketing in Northeast India	1	1

**(b) Practical based on unit I-VIII:**

Unit	Topic	Credit	Lecture/week (2 hours)
Unit-1	Practical : Identification of culturable fishes for composite and Integrated Fish Farming	1	Lab based
Unit-II	Practical : Soil Analysis (pH, soil Texture)	1	Lab based
Unit-III	Practical: Pond liming, fertilizing and feeding	1	Farm based
Unit -IV	Practical: analysis of water quality parameter (DO, CO <sub>2</sub> , pH)	2	Farm and lab based

**E) Assessment**

Modality of Assessment (50 marks)	1. (MCQs, True/False, fill in the blanks, short questions )
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(Dr Sarah M Kharbuli)  
Head  
Department of Fishery Science

**Department of Fishery Science**  
**Short Course on Scientific Fish Farming in Hills**  
**LIST OF PARTICIPANTS**

<b>Sl. No.</b>	<b>Name</b>	<b>Address</b>
<b>1</b>	Banlumlang Lyngdoh Kynshi	Marwei complex qualapatty Shillong Meghalaya
<b>2</b>	Barikupar Synrem	Rose house, Boyce road, Laitumkhrah, Shillong
<b>3</b>	B S Angkheel Anal	Lawsotun block V, Shillong, Meghalaya
<b>4</b>	Damebantei Mawa	Oakland Road, opp. C.M. bungalow
<b>5</b>	Dameshwa Rani	Riat Laban, Kynjat Phutbol, Near Hill Top Chateau
<b>6</b>	Dajiedborvicstar Myrthong	Riatsamthiah, Shillong
<b>7</b>	Dienroimiar A Mylliempdah	Pohkseh East, Near Children's Hospital, Shillong 793006
<b>8</b>	Febyonesland Diengdoh	Bernard's Residence, Nongkseh, 3rd Mile, Upper Shillong
<b>9</b>	Hubert Wilson Lyngdoh Mawna	Lawsotun, Block 6, Shillong
<b>10</b>	Nongwarngam Chinir	Dhankheti, pumpkin rooms, shillong
<b>11</b>	Raymond Priestly Myrthong	Markasa Village, West Khasi Hills District, Meghalaya
<b>12</b>	Rubin A Tariang	H No 13 Eastern side on Mawkhar main road Shillong
<b>13</b>	Rosanna Marboh	Nongrah, Nongpdeng Shillong 793006
<b>14</b>	Shainborlang lyngdoh	Laitumkhrah
<b>15</b>	Tomanbha Diengdoh	Malki-Nongshiliang, Shillong-793002
<b>16</b>	Vivian Kharshiing	351, Manik road, Madan Laban, Shillong-793004
<b>17</b>	Wanpyntngen Marbaniang	Mawlai nongmali 3