



# **AGRI-FISHERY ARTS & ICT:**

## *Content, Delivery and Assessment*

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**PATEF-UPDATE**

**13<sup>th</sup> National Convention with the theme: *Senior High School (SHS) Program:  
Updates, Issues, and Implications to Teacher Education***

**November 21 – 23, 2016**

**The Heritage Hotel Manila, Roxas Boulevard corner EDSA Pasay City**

### The Overall Goal of the K to 12 Curriculum

- Holistic development of every Filipino learner with **21<sup>st</sup> Century skills** who is adequately prepared for work, entrepreneurship, middle level skills development and higher education.
- Every graduate will be equipped with (1) **Information, media and technology skills**, (2) **Learning and Innovative Skills**, (3) Effective communication skills, and (4) **Life and career skills**.
- Ensure that every K to 12 graduate will be ready to go into different paths – **further education**, **employment** or **entrepreneurship**.

# Elementary

KINDERGARTEN  
GRADE 1-6

## Junior High School

GRADE 7-10

**Grade 7-8**  
(Exploratory TLE)

**Grade 9-10**  
(Specialized TLE)

## Senior High School

### TRACKS

#### Applied Track Subjects

##### Academic

ABM, HUMSS, STEM,  
General Academic,  
Pre-Baccalaureate Maritime

##### Technical-Vocational-Livelihood

Agri-Fishery, Home Economics,  
ICT, Industrial Arts, TVL Maritime

##### Sports

##### Arts and Design

### CORE SUBJECTS

# Decision in Choosing TVL Strand / Specialization

- Profile the potential students in your area
- Conduct an External Assessment (EA)
- Conduct an Internal Assessment (IA)
- Determine your program offerings
- Ensure that your school plan is incorporated in the implementation plan of your Schools Division Office (SDO) / VMGO of your College or University.

*SHS Manual Volume 1*

1. Core Curriculum

2. Applied Tracks

3. { Academic Track  
Sports and Arts and Design Track  
Technical – Vocational-Livelihood (TVL)  
Track

- Agri-Fishery Arts,
- Home Economics,
- Information and Communications Technology (ICT), and
- Industrial Arts

# The Agri-Fishery Arts (AFA) Curriculum Content

## Agri-Fishery Arts (AFA) Strands

- **Agricultural Crops Production** (NC I -320 hours, NC II-640 hours, \*NC III – 640 hours)
- **Horticulture** (\*NC III – 640 hours)
- **Landscape Installation and Maintenance** (NC II - 320 hours)
- **Organic Agriculture** (NC II – 320 hours)
- **Pest Management** (NC II – 320 hours)
- **Rice Machinery Operation** (NC II – 320 hours)
- **Rubber Production** (NC II – 320 hours)
- **Rubber Processing** (NC II – 320 hours)

## The Agri-Fishery Arts (AFA) Curriculum Content

- **Animal Health Care Management** (\*NC III – 320 hours)
- **Animal Production (Poultry-Chicken)**, (NC II -320 hours)
- **Animal Production (Ruminants)** (NC II – 320 hours)
- **Artificial Insemination (Ruminants)** (\*NC II) (160 hours)
- **Animal Production (Swine)** (NC II – 320 hours)
- **Artificial Insemination (Swine)** (\*NC II) (160 hours)
- **Slaughtering Operations** (NC II – 160 hours)

## The Agri-Fishery Arts (AFA) Curriculum Content

- **Aquaculture** (NC II- 640 hours)

- **Fish Capture** (NC II – 640 hours)

- **Fishing Gear Repair and Maintenance** (NC III – 320 hours)

- **Fish Products Packaging** (NC II – 320 hours)

- **Fish Wharf Operation** (NC I – 160 hours)

- **Food Processing** (NC II – 640 hours)



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| /<br>or<br>X | SUBJECTS   | Required<br>Hours<br>Per Sem | Grade & Semester the Subject is Offered |                     |                     |                     |
|--------------|--|------------------------------|---|---------------------|---------------------|---------------------|
|              |  |                              | Gr. 11                                  | Gr. 11              | Gr. 12              | Gr. 12              |
|              |  |                              | 1 <sup>st</sup> Sem                     | 2 <sup>nd</sup> Sem | 3 <sup>rd</sup> Sem | 4 <sup>th</sup> Sem |
|              | CORE CURRICULUM (same content, same competencies across curriculum offerings)  |                              |   |                     |                     |                     |
|              | Oral communication   |                              |   |                     |                     |                     |
|              | Reading and Writing  |                              |   |                     |                     |                     |
|              | <u>Komunikasyon at Panaanaliksik sa Wika at kulturang Pilipino</u>   |                              |   |                     |                     |                     |
|              | <u>Pagbasa at Pagsusuri ng Iba't-ibang Teksto Tungo sa Panaanaliksik</u>   |                              |   |                     |                     |                     |
|              | 21 <sup>st</sup> Century Literature from the Philippines and the World   |                              |   |                     |                     |                     |
|              | Contemporary Philippine Arts from the Regions  |                              |   |                     |                     |                     |
|              | Media and Information Literacy   |                              |   |                     |                     |                     |
|              | General Mathematics  |                              |   |                     |                     |                     |
|              | Statistics and Probability   |                              |   |                     |                     |                     |
|              | Earth and Life science Lecture and Laboratory<br>(Earth Science for STEM only)   |                              |   |                     |                     |                     |
|              | Physical Science Lecture and Laboratory<br>(disaster Readiness and Risk Reduction for STEM only)                         |                              |   |                     |                     |                     |
|              | APPLIED TRACK (same competencies across curriculum offerings but different content)                                      |                              |   |                     |                     |                     |
|              | English for Academic and Professional Purposes   |                              |   |                     |                     |                     |
|              | Practical Research 1   |                              |   |                     |                     |                     |
|              | Practical Research 2   |                              |   |                     |                     |                     |
|              | <u>Pagsulat sa Filipino sa Piling Larangan</u><br>( <u>Akademik, Isports, Sining, ant Tech-Voc</u> )                     |                              |   |                     |                     |                     |
|              | Empowerment Technologies (E-Tech): ICT for Professional Tracks   |                              |   |                     |                     |                     |
|              | Entrepreneurship   |                              |   |                     |                     |                     |
|              | Research Project / Culminating Activity  |                              |   |                     |                     |                     |
|              | SPECIALIZED (Note: A student can specialize in at most 4 subjects, depending on required hours, total must be 640 hours) |                              |   |                     |                     |                     |
|              | Agricultural Crops Production (NC I -320 hours, NC II- 640 hours, *NC III – 640 hours)                                   |                              |   |                     |                     |                     |
|              | Animal Health Care Management (*NC III – 320 hours)  |                              |   |                     |                     |                     |
|              | Animal Production (Poultry-Chicken). (NC II -320 hours)  |                              |   |                     |                     |                     |

# Specializations in ICT

- **Animation** (NC II) (320 hrs)
- **Broadband Installation** (Fixed Wireless Systems) (NC II) (160 hrs)  
**Pre-requisite:** Computer Systems Servicing (NC II)
- **Computer Programming** (.net Technology) (NC III) (320 hrs)
- **Computer Programming** (Java) (NC III) (320 hrs)  
*updated based on the TESDA Training Regulations  
published December 28, 2013*
- **Computer Programming (Oracle Database)** (NC III) (320 hrs)  
*updated based on the TESDA Training Regulations  
published December 28, 2013*
- **Computer Systems Servicing** (NC II)  
*updated based on the TESDA Training Regulations published  
December 28, 2013 (640 hrs)*

# Specializations in ICT

Curriculum Content for ICT

- **Contact Center Services** (NC II) (320 hrs)

- **Illustration** (NC II) (320 hrs)

- **Medical Transcription** (NC II) (320 hrs)

- **Technical Drafting** (NC II) (320 hrs)

- **Telecom OSP and Subscriber Line Installation**  
(Copper Cable/POTS and DSL) (NC II) (320hrs)

- **Pre-requisite:** Computer Systems Servicing (NC II)

- **Telecom OSP Installation** (Fiber Optic Cable) (NC II)  
(320 hrs) **Pre-requisite:** Computer Systems Servicing (NC II)

**The Agri-Fishery Arts (AFA) and ICT  
Curriculum Delivery**

**AFA & ICT is offered in two category tracks:**

**1. Technology-based TLE**

- **Exploratory – Grade 7 – 8 @ 40 hrs per quarter**
- **Specialization Course chosen from explored subjects . Grade 9 – 10**

**2. Technology and Vocational Livelihood (TVL) Track**

- **Grades 11 & 12 – continuation of the chosen specialization from Grade 9 and 10.**

**The Agri-Fishery Arts (AFA) and ICT  
Curriculum Delivery**

## **The Technology-based TLE**

- **Exploratory** – Grade 7 – 8 @ 40 hrs per quarter

### **Common Competencies:**

- (1) Use and maintenance of tools and equipment,
- (2) Mensuration and calculation,
- (3) Occupational health and safety procedures,
- (4) Preparation and interpretation of technical drawing.

## The Agri-Fishery Arts (AFA) and ICT Curriculum Delivery

The TLE and TVL courses are taught based on the **learning outcomes and performance criteria** stated in the **Training Regulations (TR) from TESDA** which will enable the graduates to earn a National Certificate (NC) I, II or even an NC of higher level that is required by industry.

# The Agri-Fishery Arts (AFA) Curriculum Delivery

## The AFA Sample Curriculum Map

SAMPLE AGRICULTURE AND FISHERY ARTS CURRICULUM MAP\*\* (updated as of May 2016)

| GRADE 7/8 (EXPLORATORY) |  |  |  | GRADES 9-12 |   |        |  |        |
|-------------------------|--|--|--|-------------|---|--------|--|--------|
| EXPLORATORY             | Agricultural Crops Production (NC I)   |  |  | 4 sems      |   |        |  |        |
|                         | Agricultural Crops Production (NC II)*<br>updated based on TESDA Training Regulations published on December 28, 2013       |  |  |             | 8 sems  |        |  |        |
|                         | †Agricultural Crops Production (NC III)  |  |  |             | 8 sems  |        |  |        |
|                         | Landscape Installation and Maintenance (NC II)   |  |  | 4 sems      | Organic Agriculture (NC II)                       |        |  | 4 sems |
|                         | Pest Management (NC II)  |  |  | 4 sems      | Rice Machinery Operation (NC II)                  |        |  | 4 sems |
|                         | Animal Production (Swine) (NC II)*<br>updated based on TESDA Training Regulations published on December 28, 2013           |  |  | 4 sems      | *Artificial Insemination: Swine (NC II)           | 2 sems | *Slaughtering Operations (Hog/Swine/Pig) (NC II) | 2 sems |
|                         | Animal Production (Large Ruminants) (NC II)*<br>updated based on TESDA Training Regulations published on December 28, 2013 |  |  | 4 sems      | *Artificial Insemination: Large Ruminants (NC II) | 2 sems | Fish Wharf Operation                             | 2 sems |
|                         | Animal Production (Poultry-Chicken) (NC II)*<br>updated based on TESDA Training Regulations published on December 28, 2013 |  |  | 4 sems      | †Animal Health Care Management NC III             |        |  | 4 sems |
|                         | Rubber Production (NC II)  |  |  | 4 sems      | Rubber Processing (NC II)                         |        |  | 4 sems |
|                         |  |  |  |             | †Horticulture (NC III)                            |        |  | 8 sems |
|                         |  |  |  |             | Food Processing (NC II)                           |        |  | 8 sems |
|                         |  |  |  |             | Fish Capture (NC II)                              |        |  | 8 sems |
|                         |  |  |  |             | Aquaculture (NC II)                               |        |  | 8 sems |
|                         | Fish-Products Packaging (NC II)  |  |  | 4 sems      | Fishing Gear Repair and Maintenance (NC III)      |        |  | 4 sems |

\* Please note that these subjects have pre-requisites mentioned in the CG.  
 CG updated based on new Training Regulations of TESDA.  
 Other specializations with no prerequisites may be taken up during these semesters.

\*\*This is just a sample. Schools make their own curriculum maps considering the specializations to be offered. Subjects may be taken up at any point during Grades 9-12.



# The ICT Curriculum Delivery

## The ICT Sample Curriculum Map

SAMPLE ICT CURRICULUM MAP\*\* (as of May 2016)

| Grade 7/8 (EXPLORATORY) |  |  |  | GRADES 9-12   |  |  |  |        |        |
|-------------------------|--|--|--|---|--|--|--|--------|--------|
| EXPLORATORY             |  |  |  | Computer Systems Servicing (NC II) <sup>+</sup><br>updated based on TESDA Training Regulations released December 28, 2007                 |  | 8 sems   |  |        |        |
|                         |  |  |  |   |  | *Telecom OSP and Subscriber Line Installation<br>(Copper Cable/POTS and DSL) (NC II) |  | 4 sems |        |
|                         |  |  |  |   |  | *Telecom OSP Installation<br>(Fiber Optic Cable)<br>(NC II)                          | *Broadband Installation<br>(Fixed Wireless Systems)<br>(NC II) | 2 sems | 2 sems |
|                         |  |  |  | Illustration (NC II)  |  | 4 sems   | Technical Drafting (NC II)                                     |        | 4 sems |
|                         |  |  |  | Computer Programming (Net Technology) (NC III) <sup>+</sup><br>updated based on TESDA Training Regulations released December 28, 2013     |  | 4 sems   | Contact Center Services (NC II)                                |        | 4 sems |
|                         |  |  |  | Computer Programming (Java) (NC III) <sup>+</sup><br>updated based on TESDA Training Regulations released December 28, 2013               |  | 4 sems   | Animation (NC II)  |        | 4 sems |
|                         |  |  |  | Computer Programming (Oracle Database)<br>(NC III) <sup>+</sup><br>updated based on TESDA Training Regulations released December 28, 2013 |  | 4 sems   | Medical Transcription (NC II)                                  |        | 4 sems |
|                         |  |  |  |   |  |  |  |        |        |
|                         |  |  |  |   |  |  |  |        |        |
|                         |  |  |  |   |  |  |  |        |        |

\* Please note that these subjects have pre-requisites mentioned in the CG.

+ CG updated based on new Training Regulations of TESDA.

■ Pre-requisites of the subjects to the right should be taken up during these semesters.

**\*\*This is just a sample. Schools make their own curriculum maps considering the specializations to be offered. Subjects may be taken up at any point during Grades 9-12.**



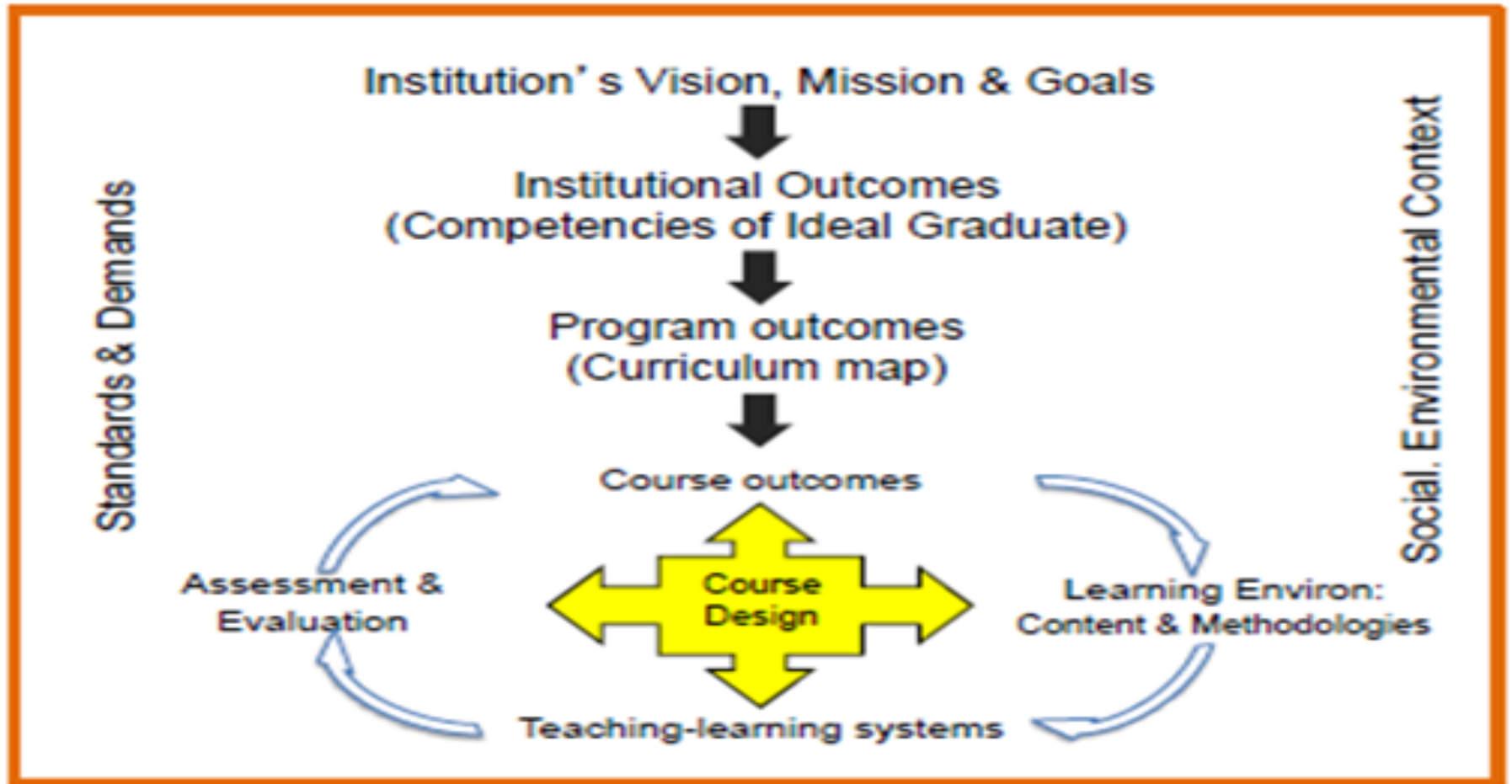
# The Assessment of Outcomes in the AFA / ICT Curriculum

- **Assessment** involves one or more processes that identify, collect, analyze, and report data that can be used to evaluate achievement of learning outcomes
- It uses relevant direct, indirect, quantitative and qualitative measures appropriate to the learning outcome.
- It is Alignment of learning outcomes, content, methodology and assessment

## Assessment in AFA and ICT Outcomes-Based Education (OBE) Curriculum

- *Outcomes-based Education* (OBE) according to CHED is an approach that focuses and organizes the educational system around what is **essential for all learners to know, value, and be able to do** to achieve a desired level of competence

# Framework for Outcomes-based Education (OBE)



Framework for Outcomes-based Education (Adopted from CHED Handbook on Typology

# **Classroom Assessment for K to 12 Basic Education (D.O. No.8 s. 2015)**

- **Classroom Assessment is an integral part of curriculum implementation.**
- **It allows the teachers to track and measure learners' progress and to adjust instruction accordingly.**
- **Classroom assessment informs the learners, as well as parents and guardians of their progress.**

# Classroom Assessment for K to 12 Basic Education (D.O. No.8 s. 2015)

| Components                       | Purpose   | When Given   |
|----------------------------------|---|--|
| <b>Written Work (WW)</b>         | <ol style="list-style-type: none"> <li>1. Assess learners' understanding of concepts and application of skills in written form</li> <li>2. Prepare learners for quarterly assessments</li> </ol>  | At end of the topic or unit  |
| <b>Performance Tasks (PT)</b>    | <ol style="list-style-type: none"> <li>1. Involve students in the learning process individually or in collaboration with teammates over a period of time</li> <li>2. Give students opportunities to demonstrate and integrate their knowledge, understanding, and skills about topics or lessons learned in a specific real-life situation by performing and/or producing evidence of their learning</li> <li>3. Give students the freedom to express their learning in appropriate and diverse ways</li> <li>4. Encourage student inquiry, integration of knowledge, understanding, and skills in various contexts beyond the assessment period</li> </ol> | <p>At end of a lesson focusing on a topic/skill lesson</p> <p>Several times during the quarter</p> |
| <b>Quarterly Assessment (QA)</b> | Synthesize all the learning skills, concepts, and values learned in an entire quarter   | Once, at end of the quarter  |

# Classroom Assessment for K to 12 Basic Education (D.O. No.8 s. 2015)

**Table 5.** Weight of the Components for SHS

|          |                      | Core Subjects | Academic Track     |  | Technical-Vocational and Livelihood (TVL)/ Sports/ Arts and Design Track |  |
|----------|----------------------|---------------|--------------------|--|--|--|
|          |                      |               | All other subjects | Work Immersion/ Research/ Business Enterprise Simulation/ Exhibit/ Performance | All other subjects   | Work Immersion/ Research/ Exhibit/ Performance |
| 11 to 12 | Written Work         | 25%           | 25%                | 35%  | 20%  |  |
|          | Performance Tasks    | 50%           | 45%                | 40%  | 60%  |  |
|          | Quarterly Assessment | 25%           | 30%                | 25%  | 20%  |  |

**“To work, the 21st century skills movement will require keen attention to curriculum, teacher quality, and assessment.”**

*Andrew J. Rotherham and Daniel Willingham*  
**Teaching for the 21st Century**

THANK YOU VERY MUCH  
AND  
GOD BLESS EVERYONE...