

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)

(160 hours)

These are the specializations and their pre-requisites. These lists should be used as reference for curriculum maps.

AGRI-FISHERY ARTS

	Specialization	Number of Hours	Pre-requisite
1.	Agricultural Crops Production (NC I)	320 hours	
2.	Agricultural Crops Production (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	640 hours	
3.	Agricultural Crops Production (NC III)	640 hours	Agricultural Crops Production (NC II)
4.	Animal Health Care Management (NC III)	320 hours	Animal Production (Poultry-Chicken) (NC II) or Animal Production (Ruminants) (NC II) or Animal Production (Swine) (NC II)
5.	Animal Production (Poultry-Chicken) (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
6.	Animal Production (Large Ruminants) (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
7.	Animal Production (Swine) (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
8.	Aquaculture (NC II)	640 hours	
9.	Artificial Insemination (Large Ruminants) (NC II)	160 hours	Animal Production (Large Ruminants) (NC II)
10.	Artificial Insemination (Swine) (NC II)	160 hours	Animal Production (Swine) (NC II)
11.	Fish Capture (NC II)	640 hours	
12.	Fishing Gear Repair and Maintenance (NC III)	320 hours	
13.	Fish-Products Packaging (NC II)	320 hours	
14.	Fish Wharf Operation (NC I)	160 hours	
15.	Food Processing (NC II)	640 hours	
16.	Horticulture (NC III)	640 hours	Agricultural Crops Production (NC II)
17.	Landscape Installation and Maintenance (NC II)	320 hours	
18.	Organic Agriculture (NC II)	320 hours	
19.	Pest Management (NC II)	320 hours	
20.	Rice Machinery Operations (NC II)	320 hours	
21.	Rubber Processing (NC II)	320 hours	
22.	Rubber Production (NC II)	320 hours	
23.	Slaughtering Operations (Hog/Swine/Pig) (NC II)	160 hours	

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

HOME ECONOMICS

	Specialization	Number of Hours	Pre-requisite
1.	Attractions and Theme Parks Operations with Ecotourism (NC II)	160 hours	
2.	Barbering (NC II)	320 hours	
3.	Bartending (NC II)	320 hours	
4.	Beauty/Nail Care (NC II)	160 hours	
5.	Bread and Pastry Production (NC II)	160 hours	
6.	Caregiving (NC II)	640 hours	
7.	Commercial Cooking (NC III)	320 hours	Cookery (NC II)
8.	Cookery (NC II)	320 hours	
9.	Dressmaking (NC II)	320 hours	
10.	Events Management Services (NC III)	320 hours	
11.	Fashion Design (Apparel) (NC III)	640 hours	Dressmaking (NC II) or Tailoring (NC II)
12.	Food and Beverage Services (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	160 hours	
13.	Front Office Services (NC II)	160 hours	
14.	Hairdressing (NC II)	320 hours	
15.	Hairdressing (NC III)	640 hours	Hairdressing (NC II)
16.	Handicraft (Basketry, Macrame) (Non-NC)	160 hours	
17.	Handicraft (Fashion Accessories, Paper Craft) (Non-NC)	160 hours	
18.	Handicraft (Needlecraft) (Non-NC)	160 hours	
19.	Handicraft (Woodcraft, Leathercraft) (Non-NC)	160 hours	
20.	Housekeeping (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	160 hours	
21.	Local Guiding Services (NC II)	160 hours	
22.	Tailoring (NC II)	320 hours	
23.	Tourism Promotion Services (NC II)	160 hours	
24.	Travel Services (NC II)	160 hours	
25.	Wellness Massage (NC II)	160 hours	

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

INDUSTRIAL ARTS

	Specialization	Number of Hours	Pre-requisite
1.	Automotive Servicing (NC I) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	640 hours	
2.	Automotive Servicing (NC II)	640 hours	Automotive Servicing (NC I)
3.	Carpentry (NC II)	640 hours	
4.	Carpentry (NC III)	320 hours	Carpentry (NC II)
5.	Construction Painting (NC II)	160 hours	
6.	Domestic Refrigeration and Air-conditioning (DOMRAC) Servicing (NC II)	640 hours	
7.	Driving (NC II)	160 hours	
8.	Electrical Installation and Maintenance (NC II)	640 hours	
9.	Electric Power Distribution Line Construction (NC II)	320 hours	Electrical Installation and Maintenance (NC II)
10.	Electronic Products Assembly and Servicing (NC II) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	640 hours	
11.	Furniture Making (Finishing) (NC II)	640 hours	
12.	Instrumentation and Control Servicing (NC II)	320 hours	Electronic Products Assembly and Servicing (EPAS) (NC II)
13.	Gas Metal Arc Welding (GMAW) (NC II)	320 hours	Shielded Metal Arc Welding (SMAW) (NC II)
14.	Gas Tungsten Arc Welding (GTAW) (NC II)	320 hours	Shielded Metal Arc Welding (GMAW) (NC II)
15.	Machining (NC I)	640 hours	
16.	Machining (NC II)	640 hours	Machining (NC I)
17.	Masonry (NC II)	320 hours	
18.	Mechatronics Servicing (NC II)	320 hours	Electronic Products Assembly and Servicing (EPAS) (NC II)
19.	Motorcycle/Small Engine Servicing (NC II)	320 hours	
20.	Plumbing (NC I)	320 hours	
21.	Plumbing (NC II)	320 hours	Plumbing (NC I)
22.	Refrigeration and Air-Conditioning (Packaged Air-Conditioning Unit [PACU]/Commercial Refrigeration Equipment [CRE]) Servicing (NC III)	640 hours	Domestic Refrigeration and Air-conditioning (DOMRAC) Servicing (NC II)
23.	Shielded Metal Arc Welding (NC I)	320 hours	
24.	Shielded Metal Arc Welding (NC II)	320 hours	Shielded Metal Arc Welding (NC I)
25.	Tile Setting (NC II)	320 hours	
26.	Transmission Line Installation and Maintenance (NC II)	640 hours	Electrical Installation and Maintenance (NC II)

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

INFORMATION, COMMUNICATIONS AND TECHNOLOGY (ICT)

	Specialization	Number of Hours	Pre-requisite
1.	Animation (NC II)	320 hours	
2.	Broadband Installation (Fixed Wireless Systems) (NC II)	160 hours	Computer Systems Servicing (NC II)
3.	Computer Programming (.Net Technology) (NC III) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
4.	Computer Programming (Java) (NC III) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
5.	Computer Programming (Oracle Database) (NC III) <i>updated based on TESDA Training Regulations published December 28, 2013</i>	320 hours	
6.	Computer Systems Servicing (NC II) <i>updated based on TESDA Training Regulations published December 28, 2007</i>	640 hours	
7.	Contact Center Services (NC II)	320 hours	
8.	Illustration (NC II)	320 hours	
9.	Medical Transcription (NC II)	320 hours	
10.	Technical Drafting (NC II)	320 hours	
11.	Telecom OSP and Subscriber Line Installation (Copper Cable/POTS and DSL) (NC II)	320 hours	Computer Systems Servicing (NC II)
12.	Telecom OSP Installation (Fiber Optic Cable) (NC II)	160 hours	Computer Systems Servicing (NC II)

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

Prerequisite: Animal Production (Swine) NC II

Course Description:

This module is an **ADVANCED** component of **Senior High School AFA – Animal Production** which leads to an **Artificial Insemination-Swine** National Certificate Level II (**NC II**). It covers **four** core competencies that a high school student ought to possess: (1) confirm readiness of sow/gilt for artificial insemination, (2) collect boar semen, (3) perform artificial insemination on sow/gilt, and (4) prepare documentation and reports on sow/gilt artificial insemination activities.

The preliminaries of this advanced course include the following: (1) discussion on the relevance of the course, (2) explanation of key concepts relative to the course, and (3) exploration on career opportunities.

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
Introduction 1. Basic concepts in artificial insemination (AI) of swine 2. Relevance of the course 3. Career opportunities	The learner demonstrates an understanding of the basic concepts and underlying theories in swine AI.	The learner independently performs core competencies in the artificial insemination of swine as prescribed by TESDA Training Regulations.	1. Explain basic concepts in swine AI 2. Discuss the relevance of the course 3. Explore career opportunities in Swine AI as a technician	
LESSON 1: ARTIFICIAL INSEMINATION - SWINE <i>(Note: Research components should be included in all activities)</i>				
1. Validate information on animal 2. Body Condition Scoring 3. Estrus Management	The learner demonstrates an understanding of confirming the readiness of sow gilt for AI.	The learner independently confirms readiness of sow / gilt for AI.	LO1. CONFIRM READINESS OF SOW/GILT FOR ARTIFICIAL INSEMINATION 1.1 Collect information on the readiness of sow/gilt for artificial insemination in a clear and logical sequence 1.2 Record client's and animal's profile using the prescribed forms and in accordance with standard operating procedure 1.3 Transact and coordinate in accordance to communication etiquette. 1.4 Make an accurate interpretation and decision based on the gathered information 1.5 Evaluate physical condition of the animal based on recommended standards 1.6 Confirm signs of estrus	TLE_AFPAAIS9-12VSE-Ia-d-1

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
			1.7 Conduct heat detection to determine if the animal is on standing heat 1.8 Perform task without causing injury to the animal, technician and others 1.9 Make an accurate interpretation and decision based on the result of the actual heat detection.	
1. Pre- collection Routines 2. Collection of boar semen 3. Semen Handling and Storage	The learner demonstrates an understanding of the process of boar semen collection.	The learner independently collects semen from the boar.	LO2. COLLECT BOAR SEMEN 2.1 Clean and dry boar according to hygiene and safety requirements 2.2 Prepare AI paraphernalia according to standard procedure 2.3 Perform preparatory activities for semen collection in accordance with hygiene and safety requirements 2.4 Lead boar to the collecting pen 2.5 Remove preputial fluid according to procedure 2.6 Massage penile area to encourage ejaculation of semen 2.7 Collect semen according to standard procedure 2.8 Evaluate semen to determine semen quality 2.9 Accomplish and file required form for semen collection 2.10 Perform semen collection with caution to ensure safety of the boar, technician and other individuals 2.11 Transfer collected semen to pre-warmed <i>semen bottles</i> .	TLE_AFPAAIS9-12PCS-I-e-j-2

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
<ol style="list-style-type: none"> 1. Pre – Insemination Procedure 2. Actual Insemination 3. Post – insemination Routines 	<p>The learner demonstrates an understanding in performing AI on a sow or gilt.</p>	<p>The learner independently performs AI on sow/gilt.</p>	<p>2.12 Pack semen properly according to required temperature</p> <p>LO3. PERFORM ARTIFICIAL INSEMINATION ON SOW/GILT</p> <ol style="list-style-type: none"> 3.1 Secure semen to be used based on clients’ requirements/requests 3.2 Prepare AI paraphernalia in accordance with established procedure. 3.3 Perform preparatory activities for AI in accordance with hygiene and safety requirements 3.4 Stimulate sow/gilt prior to AI 3.5 Perform cleaning of the external genitalia using suitable materials 3.6 Deposit semen into the female reproductive tract following recommended procedure 3.7 Perform waste disposal according to existing environmental regulations 3.8 Perform task without causing injury to the animal, technician and others 3.9 Advise clients about the management of animals after AI 3.10 Document AI activities using prescribed forms 	<p>TLE_AFPAAIS9-12PAP-II-a-g-3</p>

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
1. Collection and processing of data 2. Accomplish and submit forms	The learner demonstrates an understanding of preparing documents and reports on sow and gilt AI activities.	The learner independently prepares the documents and reports on sow and gilt AI activities.	LO4. PREPARE DOCUMENTATIONS AND REPORTS ON SOW/GILT ARTIFICIAL INSEMINATION (AI) ACTIVITIES 4.1. Secure necessary forms 4.2. Collect and process data as required in the forms 4.3. Secure evidence for breed registry (applicable to technicians of private farms) 4.4. Accomplish and submit forms to local government unit 4.5. Prepare and submit summary using required forms 4.6. Keep and compile file copies of accomplished forms and summary report according to required filing procedures	TLE_AFPAAIS9-12CA-II-h-j-4

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
 (160 hours)
CODE BOOK LEGEND

Sample: TLE_AFPAAIS9-12CA-II-h-j-4

LEGEND		SAMPLE		DOMAIN/ COMPONENT	CODE
First Entry	Learning Area and Strand/ Subject or Specialization	Technology and Livelihood Education_Agri-Fishery Animal Production	TLE_AF PA AIIS 9-12	Personal Entrepreneurial Skills	PECS
	Grade Level	Grade 9/10/11/12		Environment and Marketing	EM
Uppercase Letter/s	Domain/Content/ Component/ Topic	Raise Large Ruminant (Beef Cattle)	CA	Validate information on animal Body Condition Scoring Estrus Management	VSE
			-	Pre- collection Routines Collection of boar semen Semen Handling and Storage	PCS
Roman Numeral <i>*Zero if no specific quarter</i>	Quarter	Fourth Quarter	II	Pre – Insemination Procedure Actual Insemination Post – insemination Routines	PAP
Lowercase Letter/s <i>*Put a hyphen (-) in between letters to indicate more than a specific week</i>	Week	Week Four	h-j	Collection and processing of data Accomplish and submit forms	CA
			-		
Arabic Number	Competency	Implement herd health program	4		

Technology-Livelihood Education and Technical-Vocational Track specializations may be taken between Grades 9 to 12.

Schools may offer specializations from the four strands as long as the minimum number of hours for each specialization is met.

Please refer to the sample Curriculum Map on the next page for the number of semesters per Agri-Fishery Arts specialization and those that have pre-requisites. Curriculum Maps may be modified according to specializations offered by a school.

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
 (160 hours)

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) ⁺ <small>updated based on TESDA Training Regulations published on December 28, 2013</small>					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) ⁺ <small>updated based on TESDA Training Regulations published on December 28, 2013</small>		4 sems	*Artificial Insemination: Swine (NC II)	2 sems	*Slaughtering Operations (Hog/Swine/Pig) (NC II)	2 sems
	Animal Production (Large Ruminants) (NC II) ⁺ <small>updated based on TESDA Training Regulations published on December 28, 2013</small>		4 sems	*Artificial Insemination: Large Ruminants (NC II)	2 sems	Fish Wharf Operation	2 sems
	Animal Production (Poultry-Chicken) (NC II) ⁺ <small>updated based on TESDA Training Regulations published on December 28, 2013</small>		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.**

K to 12 BASIC EDUCATION CURRICULUM
JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL LIVELIHOOD TRACK
AGRI-FISHERY ARTS – ARTIFICIAL INSEMINATION: SWINE (NC II)
(160 hours)

Reference:

Technical Education and Skills Development Authority-Qualification Standards Office. *Training Regulations for Artificial Insemination (Swine) NC II*. Taguig City, Philippines: TESDA, 2007.