PROGRAM ACTION

Program Name: Associate of Science in Agroforestry Education for Health And Sustainable Livelihoods

Program Type:_____Bachelor's Degree (120-150 credits, with at least 40 upper division credits and 36 general education credits, including 9 upper division general education credits)

___√___Associate Degree (60-75 credits)

_____Advanced Specialization Certificate (24-36 credits, half upper division)

_____Certificate of Completion (24-36 credits)

_____Certificate of Achievement (15 or fewer credits)

Type of Action:

_√___New Program (attach budget approved by the budget committee and approved course outlines) Connection to College planning document(s):

_____Substantive Revision (attach narrative justification for changes, most recent program review, budget approved by the budget committee, and approved course outlines)

_____Non-substantive Revision (attach most recent program review and approved course outlines)

_____Reinstitution of Archived Program (attach budget approved by the budget committee and approved course outlines)
Connection to College planning document(s):

_____Reaffirmation of Program (only allowable if program completion rate exceeds ISS, the benchmark has been met for the majority of PLO assessments, and there is no evidence of inequitable levels of achievement across subpopulations; attach most recent program review and approved course outlines)

Approvals:

	Name	**Signature**	**Date**
Department Chair	Rigieta Lord		
Curriculum Committee Chair	Oyinade Ogunmokun		
Dean	Rigieta Lord		
VPASA	Dr. Elizabeth Switaj		
President*	Dr. Irene Taafaki		
BOR Chair*	Kathryn Relang		

*Required for new programs, substantive changes to programs, and re-institutions of programs only.

CMI PROGRAM CURRICULUM
Program Guide

Program Name: Associate of Science in Agroforestry Education for Health and Sustainable Livelihood
Department: ___WAVES_____
Meta-major: _____
Transfer major(s): _____
Total Credits: __69/68_____ **Semesters to Complete:** _4_____

Program purpose:
To provide a higher education degree in agroforestry, food, health, sustainability, business and cultural means of livelihood (textile plant-based cultural arts) that can address the educational, societal and livelihood needs of the unemployed and underemployed youths and older cohorts of RMI people especially those located in the remote outer islands.

Summary description of program content:
The program is forward leaning and traditionally grounded so as to be relevant to its intended stakeholders and of life-long value. The degree has two tracks: Agro-ecology and Plant-Based Cultural Arts. There are eleven new courses, which are unique and connected around a core of agroforestry, entrepreneurship and/or plant-based cultural arts. The core courses students must take are connected to traditional disciplines such as English, Math and other CMI general education course requirements. The 11 courses sit on a foundation of nine core credit courses and two electives for a total Associate's degree of 69 credits for a specialty in Agro-ecology or 68 credits for a specialty in Textiles and Plant-based Cultural Arts.

Need or demand for program:
The infusion of store bought foods into RMI, and the larger Pacific Regions, post-World War II period resulted in 1) the abandonment of traditional agroforestry based food production systems that were sustainably practiced with fishing by the RMI people, 2) drastic change in food consumption pattern leading to an explosion of diabetes and other NCD, 3) reduced practice and gradual loss of knowledge of creative methods of food preservation and preparation and of craft making, and 4) lack of familiarity with the names, nutritional values and medicinal benefits of several island plants. This is in aberration of the concept of "Food Sovereignty" defined as: The right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods; including the right to define their own food and agricultural systems.

An online meeting between the President of CMI (Dr. Irene Taafaki) and the Director of United Tribes Technical College Food Security Program (Ms Linda Black Elk) emphasized the need for better education and training to strengthen the pillars of food security in RMI through 1) application of appropriate technologies, 2) soil and climate decision support systems, 3) resilient varieties and farming systems, 4) post-harvest food safety and food preservation, 5) opportunities for sustainable livelihoods and 6) entrepreneurship. All of these led to the idea to develop a degree to cater for these needs.

In addition, the RMI's NSP (2020-2030) Pillar 1 has 4 goals viz: Health, Education and Training, Social Justice and Inclusion and, cultural and traditional Knowledge. This degree program is designed to cater for these goals as well as to the priority of the national leaders who want the rural, outer communities to be served through distance education with improved knowledge of food, agriculture, nutrition and health sciences. Also inculcated in the degree is entrepreneurial knowledge that will allow the students to create entrepreneurial environments which will give them skills to address inequities and promote social justice. One such skill addressed in the program is that based on plant-based cultural arts using agroforest products.

These needs are not just coming up now but meeting them has been challenged by how to extend higher education opportunities to the remote outer communities of RMI where the needs are more pertinent as they largely depend on agroforestry and subsistence economy. This program is therefore designed to be Hybrid (combination of face to face through Zoom and online activities) so that it can be available to the remotely located youths and willing older cohorts outside Majuro.

College mission:

The College of the Marshall Islands will provide our community with access to quality, higher and further educational services, prioritize student success through engagement in relevant Academic, Career and Technical Education, and be a center for the study of Marshallese Culture. It will also provide intellectual resources and facilitate research specific to the needs of the nation.

EC approved 4th Nov, 2020.BOR approved 1st December, 2020

Connection to College mission:

The AE-HSL supports the College's mission in many ways. Firstly, it addresses the educational, societal and livelihood needs of the unemployed and underemployed youths and older cohorts of RMI people especially those located in the remote outer islands thereby availing them access to quality, higher and further educational services in Agribusiness and Textiles and Plant-based Cultural Arts. Secondly, it provides an opportunity to engage the students in academic and technical skills relevant to agroforestry. Thirdly, the degree is structured such that lost and dying Marshallese cultural practices and words are rejuvenated and reaffirmed. Lastly, the very nature of the degree is embedded in carrying out research which is relevant to the skills of the nation.

Program mission:

The mission of the Associates degree in Agricultural Education for Health and Sustainable Livelihoods is to advance the science and practice of agroforestry in complementary and integrated manner for improved productivity of agroforest products, creation of employment opportunities and income generation through value addition to the products (including cultural items and crafts such as mats, baskets and jewelries) leading to improved health and sustained livelihoods of rural households in RMI especially those from outer islands.

Connection to program mission:

The course provides the means for students to acquire knowledge and skills to be productive agroforest professionals.

Prerequisite map:

Letters in bold represent the codes for the main courses while the normal letters are the prerequisites. The light green courses are the core courses while the deep green courses are the internships. The white courses are General Education Requirements.

Courses that are key to student progress and how students will be supported in them:

Concepts in Agroforestry and Terrestrial Ecosystems_AGF106
This course will help students in understanding the fundamental concepts in Agroforestry by identifying both the global and national needs for Agroforestry in the Marshall Islands' environment. This being the first course to introduce students to Agroforestry, students will be assisted with extra tutorials and directed readings to increase their understanding of the fundamental concepts in Agroforestry.

Nutrient Dynamics in Agroforestry AGF 107
This course explains the fundamental aspects of nutrient transformations and dynamics in agroforestry ecosystems and discusses the nutritional requirements or nutrient uptake by these agroforestry ecosystems. Students will be supported with field trips and interactive or simulated laboratory sessions. There may be a need to take students to the MNRC laboratory to carry out soil nutrient testing while we are building our own resources for in-house laboratories.

Food Sovereignty: Traditional crops for Healthy Lifestyle. AGF 108
This course takes an interdisciplinary approach to studying how sustainable agriculture has been practiced in the Marshall Islands, with particular emphasis on agro ecology, human geography, sociology, economics, democracy, health and technology. Students will be supported with new skills and knowledge through seminars, guest speakers (old people or specialists), lecturer presentations, demonstrations, field trips, video reflections, lectures and supplementary readings.

Intended post-graduation outcomes for students:

1. Jobs/careers: government, farms, craft business, agribusiness, NGO,

2. Bachelor's Degree in Agroforestry or Natural Resources program

Outcomes

Program Learning Outcome	**Linked ISLO**	**Explanation**
1. Describe the agro-forest types and systems relevant to RMI using both written and verbal form (Effective Communication)	ISLO 2: The CMI graduate will be knowledgeable and respectful of his or her own culture and respect the cultures of others.	Agroforestry is the cultural system of food production in RMI and being knowledgeable about it will lead to understanding and respect for food culture.
2. Evaluate agroforest issues technically, ethically and sustainably and demonstrate well developed reasoning based upon principles of social justice and professional standards (Critical thinking)	ISLO 4: The CMI graduate will make innovative, informed, and responsible decisions based on evidence.	The ability to evaluate agroforest issues critically will result in solutions that are innovative and technically sound.
3. Use scientific methods and business models to solve problems relevant to agro-forest production and agribusiness management. (Problem solving)	ISLO 3: The CMI graduate will use skills and knowledge to the economic, political, intellectual, social, and ethical benefit of local communities, the RMI, and the global community.	The application of scientific methods and business models for increased agroforest production results in economic and social benefit to the local and international communities.
4. Apply knowledge and experience of agroforestry to produce healthy, diversified and traditional food through ecologically sound and sustainable methods (Food sovereignty and Health)	ISLO 5: The CMI graduate will understand the importance of mental and physical well-being and be able to make personal decisions leading to a healthy lifestyle.	Food production processes involve physical activities which result in improved mental and physical wellbeing and the production of nutritious and healthy food.
5. Apply the knowledge and skills of agroforest products to set and meet entrepreneurial goals. (Entrepreneurship and sustainable livelihood)	ISLO 1: The CMI graduate will have life-goals and will know how to use available resources to achieve those goals.	The application of knowledge and skills of producing food, arts and crafts in meeting entrepreneurial goals will result in sustainable livelihood using available resources.

COURSES	**PLO 1**	**PLO 2**	**PLO 3**	**PLO 4**	**PLO 5**
AGF 106	I	I	I	I	
AGF 107	I	I	I	I	I
AGF 108	I		I	I	I
AGF 201	P	P	P	P	
AGF 202	P		P	P	
AGF 203			P	P	P
AGF 204	I	I	I		P
AGF 205		I	I	I	

AGF 206				P	
AGF 207	P		P	P	P
AGF 210	M		M		M
AGF 230	M	M	M	M	
AGF 231	P	P	P	P	
AGF 232	M	M	M	M	

I = Introduced; **P** = Practiced with feedback; **M** = Mastered at the level required for graduation

Resources required

Human resources: There is 1 instructor on board which is adequate for the first 2 semesters. With subsequent semesters, there'll be a need for more Instructors as the number of professional offerings increase. We will be using Adjuncts with requisite professional qualifications in MNRC and other organizations. In order to cater for students from outer islands, the program will be hybrid thus there is a need for an Instructional Designer. There will also be a need for a Field Technician to cater for the extensive field and lab work inherent in the program.

Physical resources:

- With most of the courses being hybrid, there will be a need for more video conference rooms that can be used to reach students from outer Atolls.
- The current Campus Garden needs to be supplemented with garden spaces at the Arrak Campus. Efforts should be made to reach out to schools in the outer Atolls for use of their school gardens (if available) or creation of gardens for students' field works. Community gardens may also be used where available.
- The current laboratory spaces at TH will be shared at the onset. However, there is a need to have laboratory space specifically dedicated to the program in the near future. The College has already purchased a license for LABSTER (a virtual Lab app) and it's currently being tested. We are looking for more virtual lab apps that may be used in outer atolls.
- There is some Lab equipment/Instruments leftover from the R2R Project. We are compiling a list of other necessary physical items.

Technical resources: Projectors, Computers, laptops, whiteboards, scanners

Library and learning support resources: There will be a need to subscribe to online journals and e-books.

For BA programs only

Distinction between upper and lower division courses:
Upper-division general education requirements:

CMI PROGRAM CURRICULUM
COLLEGE OF THE MARSHALL ISLANDS
Associate of Science (AS) Agroforest Education for Health and Sustainable Livelihoods with a specialization in Agro ecology
Program Sheet – Effective Fall 2022

Name_____
Last Name **First Name** **Middle**
Date of Birth_____ **High School**_____

Date of Graduation_____ **Matriculation**_____ **Student ID #** _____

Contact #_____ **E-mail**_____

C or better in all required courses

General Education Requirements (26 credits)

College Experience (3 credits)	**Term**	**Grade**	**Credits**
CMI 101 First Year Seminar			
English (7 credits)			
ENG 105 Fundamentals of Speech			
ENG 111 English Composition I			
Humanities (3 credits)			
MAR 130 Marshallese Culture			
Mathematics (3 credits)			
MATH 102 Survey of Mathematics			
Science with Lab (4 credits)			
AGR 101 Introduction to Agriculture			
Social Issues (3 credits)			
SOC 130 Introduction to Sociology			
Technology (3 credits)			
ICS 101 Introduction to Microsoft Office			
Core Courses (43 credits)			
BUS 101 Introduction to Business			
AGF 106 Agroforestry & Terrestrial Ecosystems			
AGF 107 Nutrient Dynamics in Agroforestry			
AGF 108 Food Sovereignty: Traditional crops for Healthy Lifestyle			
AGF 201 Silvicultural Systems in Agroforestry Management			
AGF 202 Integrated Coastal Management and Social Forestry			
AGF 205 Climate, Food Security and Heath			
AGF 210 Agricultural Entrepreneurship			
AGF 230 Agroforestry Internship III			
AGF 231 Agroforestry Internship I			
AGF 232 Agroforestry Internship II			
AGF 206 Food Preservation and Safety			
AGF 207 Aquaponics			

Degree Total (Agro ecology specialization) **69 Credits**

Approved: Spring 2022

CMI PROGRAM CURRICULUM
COLLEGE OF THE MARSHALL ISLANDS
Associate of Science (AS) Agroforest Education for Health and Sustainable Livelihoods
Program Sheet – Effective Fall 2022
with a specialization in Textiles and Plant-based Cultural Arts

Name_____
Last Name **First Name** **Middle**
Date of Birth_____ **High School**_____

Date of Graduation_____ **Matriculation**_____ **Student ID #** _____

Contact #_____ **E-mail**_____

C or better in all required courses

General Education Requirements (26 credits)

College Experience (3 credits)	**Term**	**Grade**	**Credits**
CMI 101 First Year Seminar			
English (7 credits)			
ENG 105 Fundamentals of Speech			
ENG 111 English Composition I			
Humanities (3 credits)			
MAR 130 Marshallese Culture			
Mathematics (3 credits)			
MATH 102 Survey of Mathematics			
Science with Lab (4 credits)			
AGR 101 Introduction to Agriculture			
Social Issues (3 credits)			
SOC 130 Introduction to Sociology			
Technology (3 credits)			
ICS 101 Introduction to Microsoft Office			
Core Courses (42 credits)			
BUS 101 Introduction to Business			
AGF 106 Agroforestry & Terrestrial Ecosystems			
AGF 107 Nutrient Dynamics in Agroforestry			
AGF 108 Food Sovereignty: Traditional crops for Healthy Lifestyle			
AGF 201 Silvicultural Systems in Agroforestry Management			
AGF 202 Integrated Coastal Management and Social Forestry			
AGF 205 Climate, Food Security and Heath			
AGF 210 Agricultural Entrepreneurship			
AGF 230 Agroforestry Internship III			
AGF 231 Agroforestry Internship I			
AGF 232 Agroforestry Internship II			
AGF 203 Agro-Industry Products			
AGF 204 Textiles & Plant-Based Cultural Arts			

Degree Total **68 Credits**

Approved: Spring 2022