

## **DRAFT Indigenous Food Systems Diploma or Certificate Program University of Manitoba**

### **Planning Team for Indigenous Food Systems Diploma or Certificate Program**

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### **Indigenous food systems**

Indigenous food systems are the origins of the world's food supply (Settee and Shuklah, 2020). Indigenous foods are the traditional foods harvested from the land or water, including wild game, fish and berries. Harvesting Indigenous foods are central to Indigenous people's identity, culture, health and self-determination (Gombay, 2010; Settee and Shuklah, 2020). Indigenous food systems provide sustenance connected to land, territories, stewardship, identity, way of life and spirituality. Indigenous food systems were largely intact in mid-western Canada up until the signing of the Numbered Treaties (Fieldhouse & Thompson, 2012). Although much Indigenous food-related knowledge remains, knowledge transmission and access to land has been disrupted by colonialism.

Indigenous food systems in Canada are in need of revitalization as indicated by the high rates of food insecurity in Indigenous communities. Roughly half (50.8 per cent) of households within First Nation reserves (First Nations Information Governance Centre, 2018) experienced food insecurity and 75 per cent of households in northern Manitoba communities, prior to COVID-19, were food insecure (Thompson et al, 2012). This means most First Nation households on reserve had inadequate or unstable access to nutritious food due to financial constraints, before COVID-19, compared to 1 in 8 Canadians (4.4 million Canadians). Clearly, food security in First Nations needs urgent attention, which requires food security action plans and education.

### **Indigenous Food Systems Curriculum**

The Indigenous food systems curriculum has yet to be determined. Initial discussions have identified two types of courses should be offered:

1. Courses focused on theory and practice to include the following subject areas: agriculture, policy, Indigenous knowledge systems, land-based education, cultural and sacred aspects of food, nutrition and health, basic workplace training, traditional land uses (fishing, hunting, gathering, medicines), commercial fishing,

- landscape or permaculture design for food, fisheries, wild rice, wildlife and forestry, Self-determination/food sovereignty, marketing and sharing food in community (co-operatives or farmer's market and country food program), business development/circular economy, food handling, logistics and safety, food preparation, food sovereignty/food security planning etc.
2. Project-based courses/internships with Metis and First Nation communities and Indigenous businesses (e.g., Myera and Aki Foods) and organizations

Subjects could include: designing sustainable food landscapes, wild rice harvesting and planting; farming vegetables, fruit and potentially grains; harvesting traditionally (hunting, fishing, medicines); traditional food ceremonies and spirituality; food handling, logistics and safety; food preparation; nutrition; food sovereignty/food security planning; and business development/circular economy.

A one-year certification/diploma program in Indigenous Food Systems from University of Manitoba starting in May 2021 is proposed. A one-year program allows harvesting in each season around the year. Where this program will reside at the University is uncertain. Bobiwash noted he meet with his dean regarding this program and is meeting with more Deans/faculty next week. Potentially this interdisciplinary program can be shared between CHREER, Agriculture and possibly Science with input and shared courses and research with Architecture and Engineering's Access program. Herrmann offered that these diploma students can attend on-line and other access programs in Engineering for upgrading where space are available. This applied program is expected to provide an effective means to recruit students to the University for CHREER, Science (Wawatay), Agriculture, Recreation/Kinesiology, Engineering and Architecture. The courses in this program will be designed for advance credit for entry into some academic disciplines towards a degree.

This applied program would be based both at the University of Manitoba and on the land in Indigenous communities as well as in Indigenous food businesses. The hands-on aspects of the program for the first two years (2021/2022 and 2022/2023) is proposed to be mainly situated at Brokenhead Ojibway Nation (BON). This is to assist with the funded program of the Canadian Agricultural Partnership (CAP) proposal for wild rice education and programming, which is associated with the BON location and preliminary arrangements made with the BON regarding their farm and community. As well as being grounded in Indigenous communities (First Nation and Metis) by working on Indigenous farms and in Indigenous traditional territories we will also learn from Indigenous food businesses, including Myera Group, to ground the education in Indigenous realities. Myera Group, through the wild rice CAP funding with MITACS funding, can provide work internships to this education program in the first few years to work with local students (certificate or diploma) and graduate students on projects of mutual benefit. Myera Group also has developed a virtual reality program of plant and fishery care, to enhance learning.

For the first year of the program in 2020/2021, 15 to 25 Indigenous people would be recruited. A student stipend would be provided to these Indigenous students through the Mino Bimaadiziwin partnership. Recruiting First Nation undergraduate students will be

undertaken with BON and other Indigenous communities in the South East District Regional Council but also other areas in Manitoba (e.g., Island Lake, Interlake) and Metis people. This recruitment and community programming should expand to new communities in future years.

We hope to start in May 2021 with a 10 to 12 day permaculture design course at Brokenhead Ojibway Nation (BON) and the University of Manitoba with 25 local students but also 10 graduate students. This permaculture design course provides a planning process that will help facilitate building the farm and aquaculture infrastructure to enable the Indigenous-centred education program. This course was successfully done in 2017 jointly with First Nation community members and graduate students, which resulted in permaculture designs and everyone earning an International Permaculture Design Certificate. During the week students will participate one day per week during the summer and early fall participating in an experiential learning courses at Glenlea field station, to obtain Agr 3030 and 3040. Dr. Bobiwash and others are working with the program coordinator to build in Indigenous elements into these course:

<https://umanitoba.ca/faculties/afs/student/experientiallearning.html>

The remainder of the week will be learning from Elders and instructors at the BON food program.

### **Indigenous Education program**

An Indigenous approach to education will be taken applying the five beneficial practices recognized by the 2014 First Nations, Inuit and Metis Essential Skills Inventory Project, namely: 1) working with/in the community; 2) learner-centered, holistic approaches; 3) Indigenous learning principles, 4) employer involvement to provide workplace experience, and 5) control and ownership (Canadian Career Development Foundation, 2014). Indigenous language, respect, caring and holism are integral to Indigenous knowledge systems (Ballard, 2012; Flavier, 1995; Warren, 1991). Education programming will be taught by Elders and local knowledge holders, as well as University-educated teachers, through a train-the-trainer model to deliver a post-secondary certificate or diploma. To allow applied training we will work with local Indigenous people to accomplish and learn from local food projects as well as undertake community harvesting and stewardship activities for medicines, animals and fish.

Many Indigenous people are viewing self-determination as a framework to improve the educational experience and outcomes in their communities and overall to overcome Indigenous oppressions that include poverty and racial discrimination (Brayboy & Castagano, 2009; Fallon & Paquette, 2012; Israel Weinstein, 2014; National Aboriginal Health Organization, 2009). Three factors are identified as being important for Indigenous self-determination, which will be prioritized in education and research, namely: 1) cultural identity; 2) culturally-appropriate sustainable livelihoods; and, 3) sovereignty (Hibbard and Adkins, 2013).

## Appendix A: Funding Resources for Indigenous Food Systems Program

Funding resources are available from Mino Bimaadiziwin Partnership grant (ecohealthcircle.com) and Canadian Agriculture Program (CAP) program called “Field Trials for Growing Wild Rice on Inland Paddies”. Undergraduate student stipends amount to \$200,000 in 2021 and \$200,000 in 2022. Graduate student stipends amount to \$50,000 or more per year

CAP Funding for 2020 to 2023 for wild rice education and programming at Brokenhead farm and Myera Group Innovation Centre for students:

Salaries, Wages and Benefits								
Expense Type	Total Cost 2020/21	Requested 2020/21	Total Cost 2021/22	Requested 2021/22	Total Cost 2022/23	Requested 2022/23	Total Cost	Total Requested
Graduate Student Wages	\$ 17,500.00	\$ 0.00	\$ 35,000.00	\$ 0.00	\$ 17,500.00	\$ 0.00	\$ 70,000.00	\$ 0.00
Fellowships	\$ 30,000.00	\$ 0.00	\$ 30,000.00	\$ 0.00	\$ 30,000.00	\$ 0.00	\$ 90,000.00	\$ 0.00
Summer Student Wages	\$ 60,000.00	\$ 0.00	\$ 60,000.00	\$ 0.00	\$ 60,000.00	\$ 0.00	\$ 180,000.00	\$ 0.00

**In-Kind Contribution:** non-monetary goods and services that are not reimbursable by the program, but may be considered by the program administrator as part of the applicant's contribution requirement. The total value of in-kind contributions must not exceed 50 per cent of the applicant's contribution. For more information, refer to the program Guidebook.

Expense Type	Total 2020/21	Total 2021/22	Total 2022/23	Total
Salaries & Wages	\$ 80,000.00	\$ 85,000.00	\$ 90,000.00	\$ 255,000.00
Land, Equipment and Facilities	\$ 20,000.00	\$ 25,000.00	\$ 10,000.00	\$ 55,000.00
Materials and Supplies	\$ 10,000.00	\$ 15,000.00	\$ 5,000.00	\$ 30,000.00
Inventory				\$ 0.00
Sub Total In-Kind Contribution	\$ 110,000.00	\$ 125,000.00	\$ 105,000.00	\$ 340,000.00

\$30,000 for teacher certification/curriculum development/educational resources development for the students at Brokenhead; 5000

**NOTE:** \$ for filming and film edition at Brokenhead FN; KT regarding field trials with partners