



Implementing the United Nations Declaration on the Rights of Indigenous Peoples in the University College of the North's Natural Resources Management Technology Program

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May 16, 2014

This report was produced as a result of a practicum placement at University College of the North (UCN) by Heidi Cook, student in the Master's of Development Practice – Indigenous Development program at the University of Winnipeg, from January to April 2014.

UCN has endorsed the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and is currently engaging in issues of implementation, through its strategic planning and program review processes. For the student, the outcomes were to achieve a better understanding of on-the-ground implementation of the UNDRIP and gain experience in the program review process. Through the practicum, UCN also received an assessment of the existing Aboriginal content of the Natural Resources Management Technology (NRMT) program and recommendations regarding the integration of UNDRIP into the NRMT curriculum, which are the focus of this report.

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BACKGROUND ON THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES

The United Nations General Assembly adopted the Declaration on the Rights of Indigenous Peoples on September 13, 2007 (United Nations, 2008). The UNDRIP is a comprehensive human rights instrument which recognizes individual and collective rights, and sets minimum standards for the dignity, survival and well-being of indigenous peoples (Indigenous Bar Association, 2011; Wiessner, 2009). Canada was one of four nations who opposed the Declaration at the time it was adopted, although it was eventually endorsed by Canada on November 12, 2010.

The Declaration came about as a result of decades of lobbying by indigenous peoples at the international level for recognition of their rights and treaties. The United Nations Working Group on Indigenous Populations was established in 1984, followed by over 20 years of drafting and negotiations between states and indigenous peoples to produce the text of the Declaration (Indigenous Bar Association, 2011; Wiessner, 2009).

In legal context, declarations are 'soft' law, non-binding on states as they are adopted by resolution, as opposed to treaties and conventions which require ratification and are binding or 'hard' law (Indigenous Bar Association, 2011). However, declarations create an expectation that states will abide by them, and as they become accepted in practice they can become part of the binding legal framework (Wiessner, 2009). The UNDRIP establishes a set of principles and norms that can and have served as a reference for the interpretation of domestic law in some cases. Also, the UNDRIP is linked to other human rights instruments that are binding and place a moral, if not legal, obligation on states to uphold.

Full realization of the rights in the Declaration will require involvement of all of civil society. Implementation involves more action than just governments aligning their laws and policies. Courts and tribunals can use UNDRIP in the interpretation of the law, indigenous peoples can use it as a framework for policies, decision-making, and negotiations, corporations can use it to guide business policies and practice, it can form part of the curriculum and teacher training at educational institutions, and for civil society in general it can be the basis for cooperation (Indigenous Bar Association, 2011).

UNIVERSITY COLLEGE OF THE NORTH AND THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES

In an educational institution such as UCN, the implementation of the UNDRIP can be approached in a number of ways. The principles and norms set out in the Declaration may be included in curriculum and teacher training, and reflected in policies that govern the institution. With the involvement of indigenous peoples, education can also be shaped in a way that mutual goals of the institution and indigenous peoples are achieved. In some ways, UCN is ahead of the curve in the implementation of UNDRIP. UCN has a stated mission to be inclusive and respectful of Aboriginal

values and beliefs and has a unique structure for the involvement of Aboriginal elders to help implement that vision, as is demonstrated in the formal incorporation of the Kenanow learning model.

The Natural Resources Management Technology program is an important program to consider in implementing the Declaration, given the importance of land to indigenous peoples and evidenced by the number of UNDRIP articles referencing land and/or development and related decision-making. In a program considered a 'flagship' of UCN, the implementation of UNDRIP represents an opportunity to uniquely position the NRMT in Canada and make it more reflective of UCN's mission to be "inclusive and respectful of diverse Northern and Aboriginal values and beliefs" (UCN, 2014).

A reading of UNDRIP with implementation at UCN and in particular the NRMT in mind cannot and should not focus solely on articles specific to natural resources management. These articles do provide important concepts to be reflected in the program and curriculum, however, the articles of the Declaration are meant to be read as a whole, and in the context of other human rights instruments as well (Indigenous Bar Association, 2011; United Nations, 2008). The following discussion outlines some of the important concepts found in specific articles of the Declaration, the full text of which can be found in Appendix I. The values and standards that are expressed in UNDRIP are then summarized as key themes or 'big ideas' that can be incorporated as an overall outcome of learning in the NRMT program.

OVERVIEW OF SELECTED ARTICLES

Within the UNDRIP, the first few articles contain concepts that may be considered foundational and important context for the rest of the Declaration. Article 1 states that indigenous peoples are entitled to the full enjoyment of human rights and fundamental freedoms, individually and collectively. Article 2 states that indigenous peoples have the right to be free from discrimination, particularly on the basis of identity and in the exercise of rights. Article 3 states the right to self-determination, which includes the right to determine political status. Article 4 states the right to autonomous self-government in local and internal matters. The themes of human rights, freedom from discrimination, self-determination and self-government run throughout the Declaration.

In October 2013 the UCN Tri-Council began a discussion on the implementation of UNDRIP and considered the actions implicated by a few articles of the Declaration. Article 11 speaks to the right to cultural practices and property, and participants spoke about the connotations for intellectual property and research guidelines at UCN. Article 12 speaks to ceremonial practices, which is an area engaged by UCN and recognized as integral to understanding indigenous worldviews, but is an ongoing challenge to reconcile within institutional settings. Article 13, involving the transmission of history, language, philosophy, etc., was discussed in context of what UCN is already doing or wants to do, such as language instruction or local content in the curriculum. In discussion of Article 24 involving traditional medicines and health practices, participants talked about the midwifery program, the Northern Forest Diversification initiative, and the NRMT as areas of application. Article 31 speaks to cultural heritage, traditional knowledge and intellectual property, which was also discussed in terms of research ethics, with opportunities for respectful research becoming a specialization at UCN.

Further to these, several more articles merit attention for the ideas particularly relevant in the NRMT. Article 15 highlights the need for actions to combat prejudice, eliminate discrimination, and promote tolerance, understanding and good relations between indigenous peoples and the rest of

society. This is important because natural resources are the basis of the economy for Canada and indigenous identity is inseparable from the land. Graduates of the program may find themselves in situations that require a good understanding of the underlying context for resource conflicts. They will need knowledge to negotiate effective strategies for cooperation. The opportunity to combat prejudice and promote good relations between indigenous peoples and society as a whole can be captured with appropriate education.

Article 21 asserts that indigenous peoples have “the right, without discrimination, to the improvement of their economic and social conditions...” (United Nations, 2008). This is relevant because of the deep association between resource management and the economic and social conditions of indigenous peoples. In addition, this program may attract a large proportion of indigenous students, many of whom will approach their education with different goals than the typical student.

Finally, articles 26, 29 and 32 speak directly to the traditional territories and natural resources of indigenous peoples and reflect concepts that must be understood in the NRMT. The right to their territories (Article 26) is a basic understanding held by indigenous peoples that resource managers should grasp, as well as reflecting the rights of self-determination and self-government in determining how resources are managed and developed. Similarly, the right to conservation and environmental protection (Article 29) is important for resource management and the theme of free, prior and informed consent is one that is found throughout the Declaration. The right to determine development and again, the right of free, prior and informed consent (Article 32) basically amount to an indigenous right to resource management.

INCORPORATING THE DECLARATION IN LEARNING AT UCN

Incorporating the values and standards expressed in the UNDRIP into curriculum at UCN and the NRMT in particular can seem like a daunting task. The undertaking may be simplified or focussed using the concept of ‘big ideas’ in education. Big ideas convey the overall understandings that link individual learning objectives (Wiggins, 2010). Big ideas express the themes rather than the details, and therefore can be a useful starting point for beginning to incorporate UNDRIP principles in the NRMT. The following are suggestions for big ideas (in bold) that may guide the incorporation and implementation of UNDRIP at UCN and in particular the NRMT.

- ❖ **The recognition of indigenous rights is necessary to correct the discriminatory practices of colonization, including historic and ongoing dispossession and assimilation, which violate the human rights of Indigenous peoples.** The UNDRIP includes a recognition that racist legal doctrines were and are used to justify injustices against indigenous peoples, who were not acknowledged as human beings having rights (Indigenous Bar Association, 2011). Specific recognition of indigenous peoples’ rights is therefore a necessary step towards restoring equality and addressing systemic discrimination that prevents the social and economic development of indigenous peoples.
- ❖ **The inclusion of indigenous perspectives in cooperation with Indigenous peoples in curriculum and training at UCN will promote tolerance, understanding and good relationships between Indigenous peoples and other segments of society.** Following from Article 15 of the Declaration, the inclusion of indigenous perspectives is an action that promotes good will between indigenous and non-indigenous peoples. Also following from

the previous point or big idea, the exclusion of indigenous peoples and the denial of rights is a source of conflict which this action seeks to address.

- ❖ **Indigenous rights are existing and inherent. They are not new or created by UNDRIP.** Inherent rights are held simply by virtue of being. Many people would say that they are 'god-given' rights, that is to say the source of these rights is inalienable. Suppression of inherent rights does not eliminate them from existence and a new recognition of existing rights should not be confused with the creation of new rights.
- ❖ **Indigenous nations have the right to self-determination and self-government.** Self-determination means indigenous peoples can identify who they are as a people or nation, and can determine their political status as such (Indigenous Bar Association, 2011). The right to self-determination is fundamental to many other rights, including the right to self-government. Indigenous peoples can shape their governing institutions and determine their relationship to the state. Self-determination was one of the more controversial rights included in UNDRIP but the Declaration asserts that the self-determination of indigenous peoples shall not be taken as a threat to state sovereignty.
- ❖ **Indigenous peoples have the right to own, use, occupy, and manage the territory and resources they have traditionally used.** Colonization and dispossession of indigenous territories was justified using racist doctrines such as *terra nullius*, and the recognition of indigenous peoples' rights to their territories addresses this injustice. Indigenous peoples may also retain rights of use and occupation and participate in management of territories and resources that are controlled by the state.
- ❖ **Indigenous knowledge, cultural items, ceremonial practices, etc. are the property of Indigenous peoples.** Research that involves indigenous peoples must meet an ethical standard that recognizes and respects indigenous customs and protocols. The principles of ownership, control, access and possession (OCAP) should be well known in an educational institution. Indigenous peoples also have the right to repatriate cultural and ceremonial items and to give permission for the use of cultural imagery and items.
- ❖ **The free, prior, and informed consent of indigenous peoples is required when an activity or decision may impact on the rights of indigenous peoples.** Free consent means it is given without the application of pressure or threats to reach a decision, prior means before an action or decision has occurred, and informed means a decision is made with all available information. Consent is related to what we know as the duty to consult, however this goes further than consultation and is generally good practice.
- ❖ **The legal framework for indigenous rights in Canada is evolving and international standards such as UNDRIP can provide context and guidance for this evolution.** The character and extent of indigenous rights in Canada has been defined for the most part through Supreme Court rulings on constitutional and other arguments since the patriation of the Canadian constitution in 1982. The constitution recognized and affirmed existing rights but did not define them. Indigenous rights continue to be defined and as part of the international legal standard, the UNDRIP can suggest how the definition of rights will evolve.

ABORIGINAL CONTENT AND PERSPECTIVES IN NATURAL RESOURCES MANAGEMENT TECHNOLOGY COURSES

The NRMT program requires the completion of 78 credit hours in 30 courses, 22 of which are courses exclusively offered by UCN for the NRMT totalling 71 credit hours. Three UCN courses that are not specific to the NRMT are also part of the program requirements. One of these is the *Tradition and Change* one credit-hour course that is offered in collaboration with recognized Elders to provide students with insight into Aboriginal perspectives and the culture and history of the local community wherever it is offered. *Tradition and Change* is intended to be a requirement of all programs at UCN, specifically to address the need for greater understanding and to promote good relationships between indigenous and non-indigenous peoples in the north.

Of the 22 courses that are specific to the NRMT program, eight include specific or inferred references to some Aboriginal content and/or perspectives in their course descriptions or learning outcomes (courses represent 29 credit hours) (see Appendix II for evidence of Aboriginal content and perspectives in NRMT courses). Of the slightly more than one-third of NRMT courses identified, which also represent 40% of the NRMT-exclusive credit hours, half specifically identify the nature of Aboriginal content or perspectives, whereas consideration of Aboriginal content or perspectives is implied in the other half but not explicitly stated. This lack of clarity may make for more flexibility in the ways in which Aboriginal perspectives are incorporated but it also presents the possibility that they may be excluded altogether. A detailed assessment of lesson plans was not done for this evaluation but given the commitment of NRMT faculty to providing a quality comprehensive education the latter is less likely.

UCN and the NRMT do not have targets for the inclusion of Aboriginal content and perspectives in the curriculum. On the surface, having 34 to 40% of courses in the NRMT include such content is an encouraging sign. However, it has not and will not be demonstrated through this assessment whether the Aboriginal content or perspectives inform meaningful learning throughout the courses or are treated as discrete topics. A detailed assessment of lesson plans would provide a more accurate estimate of the proportion of the NRMT curriculum that reflects Aboriginal content or perspectives.

A further nine NRMT courses representing 27 credit hours were identified as having the potential to incorporate Aboriginal content and perspectives (see Appendix III for the descriptions of potential courses). The following section links these nine courses with the UNDRIP themes or 'big ideas' from the preceding section.

INCORPORATING PRINCIPLES FROM THE DECLARATION IN THE NRMT

This section identifies additional NRMT courses that could potentially reflect Aboriginal content and/or perspectives. The ways in which content and perspectives may be reflected is described under the UNDRIP themes previously identified. In this way, specific examples are linked to the general themes suggested as a starting point.

The inclusion of indigenous perspectives in cooperation with Indigenous peoples in curriculum and training at UCN will promote tolerance, understanding and good relationships between Indigenous peoples and other segments of society.

In courses specific to resource management, such as *Water Resources*, *Zoology*, *Forestry Practices*, *Fisheries Management*, and *Wildlife Management*, the incorporation of Aboriginal perspectives can go a long way in promoting understanding and good relationships between indigenous peoples and resource managers. Explanations of indigenous ethical codes, approaches to management, or spiritual taboos as they relate to the subject matter can also help to prepare graduates for reactions or conflicts that may occur in these career fields. For example, the Cree belief in the natural law of *ohcinewin*, in which intentional or unintentional harm or cruelty to another living being will bring consequences back on oneself or one's family, can help to explain hesitancy or opposition to intrusive wildlife research. Teaching about inanimate resources, such as water, minerals, or forests, may also be considered differently from an indigenous perspective; for example, some indigenous people may object to the treatment of water simply as a resource, rather than a sacred and essential element of life. Without spiritual direction or sanctioning, non-interference may be the preferred management strategy of many indigenous peoples.

Indigenous peoples have the right to own, use, occupy, and manage the territory and resources they have traditionally used.

In resource management courses such as *Water Resources*, *Zoology*, *Forestry Practices*, *Fisheries Management*, and *Wildlife Management*, students should grasp that the ownership, use, occupation, and management of land, water and resources is not exclusively and uncontestedly in the purview of the provincial government and why. Whereas Treaty and Aboriginal rights are covered in *Natural Resource Law Enforcement* courses, there is an additional opportunity to link and reinforce the lessons with examples specific to the material in other courses. Additionally, in a course such as *Geographic Information Systems*, lessons can include traditional land use mapping as an exercise in the practical application of this right by indigenous peoples.

Indigenous knowledge, cultural items, ceremonial practices, etc. are the property of Indigenous peoples.

The collection and application of indigenous traditional knowledge is gaining in popularity and acceptance in resource management. Instructors and students should be aware of the ethical requirements for the collection and use of traditional knowledge, and appropriate protocol for engaging indigenous peoples in research. For field and experiential courses, instructors and students should be aware of the protocol for ceremonial or sacred spaces, places, and items. This theme could find application in courses such as *Water Resources*, *Zoology*, *Forestry Practices*, *Fisheries Management*, *Wildlife Management*, *Navigation and GPS*, *Resource Field Safety and Skills*, and *Fall Field Camp*.

The free, prior, and informed consent of indigenous peoples is required when an activity or decision may impact on the rights of indigenous peoples.

Every resource management activity or decision may impact on the rights of indigenous peoples. Beyond rights to territory, resources, traditional medicines, and livelihoods, there are also the rights to decision-making and resource management articulated in the UNDRIP. To foster good relationships and avoid resource conflicts, students of resource management should learn to strive to the standard of free, prior, and informed consent in their work with

indigenous peoples. Many indigenous communities have engagement protocols for researchers who are active or wish to conduct research in an indigenous territory. Review and discussion of some of these protocols and best practices for research can be included in courses such as *Water Resources*, *Zoology*, *Forestry Practices*, *Fisheries Management*, and *Wildlife Management* to help prepare students to engage with indigenous communities.

OPERATIONAL CONSIDERATIONS IN THE IMPLEMENTATION OF THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES

The discussion on the implementation of UNDRIP in the NRMT program has focussed on the reflection of indigenous rights themes in the curriculum. UCN has already considered many of the operational issues that arise in the undertaking of such work, further to its mission to include Aboriginal and northern content (UCN, 2013). Some of the institutional considerations identified include issues pertaining to the collective agreement, UCN policies and procedures (or lack thereof in some cases), and of course the budget.

Matters such as hiring and promotion and intellectual property are defined in the collective agreement and have been identified as potentially constraining some initiatives to recognize indigenous knowledge, elders and teachers in the institution (UCN, 2013). Since the issue has been identified UCN has begun exploring options that will allow it to recognize the validity of non-academic credentials and the knowledge of indigenous elders and teachers. Newer, flexible arrangements may benefit the NRMT program if the inclusion of indigenous elders or teachers in co-teaching certain topics or the addition of an indigenous faculty member is desired in the future.

Some of the policies related to Aboriginal and northern content in the curriculum make reference to positions or resources that may have been intended but do not currently exist at UCN (UCN, 2013). This makes it difficult for staff who wish to incorporate new content but are left stuck with referrals to non-existent resources. Further, there is no policy or guideline that states expectations for Aboriginal and northern content in the curriculum. UCN has begun to address some of these deficiencies with changes to course approvals and administrative processes, and there is a strong commitment amongst senior management to fulfil the mission of UCN.

The availability of budget resources to dedicate to curriculum and content development and the inclusion of indigenous teachers is likely an ongoing struggle. However, UCN does have some assets that it can tap into in order to further its work on the inclusion of indigenous content and the implementation of UNDRIP. The UCN Elders Council and Elder-in-Residence are existing positions for Elders within UCN, potentially these Elders could be engaged in discussions and provide guidance regarding curriculum content. There may also be informal networks that exist between the faculty and Aboriginal and northern residents that can help to generate ideas and methods for incorporating new concepts and lessons in the curriculum.

The program review process is an ideal time to engage in discussions and work on curriculum renewal. Within the NRMT there is opportunity and appetite for program adjustments that will benefit students, their future employers, and recruitment and retention at the institution. The faculty in the NRMT program have expressed keen interest in incorporating Aboriginal and

northern content and reflecting UNDRIP themes, but with varying levels of familiarity and comfort that would allow them to do so. The discussion paper on Aboriginal and northern content at UCN (2013) makes several recommendations regarding the process and resources available for curriculum renewal. While some of the processes have been implemented there is still not an Aboriginal curriculum specialist in the Academic Development department who can assist in this work. Support and training is needed for faculty to see through the implementation of new curriculum content.

CONCLUSION

UCN is an invaluable resource for education and development in northern Manitoba and is well positioned to become a global leader in indigenous education initiatives, such as the implementation of UNDRIP. There are plenty of opportunities, big and small, to connect UNDRIP to on-the-ground action. At UCN a big focus is on Aboriginal content and perspectives being reflected in the curriculum. This goes a long way to promote understanding and combat discrimination, one of the goals of the Declaration. While there are challenges to implementing change in any institution, the commitment of staff and management at UCN to providing a quality education that is relevant in today's society is resolute. This report has suggested a starting point for incorporating the UNDRIP in curriculum and shown that progress is being made in addressing the impediments to institutional change. With time and sustained effort, there is no doubt that UCN can achieve its mission.

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APPENDIX I: UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES

Resolution adopted by the General Assembly

[without reference to a Main Committee (A/61/L.67 and Add.1)]

61/295. United Nations Declaration on the Rights of Indigenous Peoples

The General Assembly,

Taking note of the recommendation of the Human Rights Council contained in its resolution 1/2 of 29 June 2006,¹ by which the Council adopted the text of the United Nations Declaration on the Rights of Indigenous Peoples,

Recalling its resolution 61/178 of 20 December 2006, by which it decided to defer consideration of and action on the Declaration to allow time for further consultations thereon, and also decided to conclude its consideration before the end of the sixty-first session of the General Assembly,

Adopts the United Nations Declaration on the Rights of Indigenous Peoples as contained in the annex to the present resolution.

107th plenary meeting

13 September 2007

Annex

United Nations Declaration on the Rights of Indigenous Peoples

The General Assembly,

Guided by the purposes and principles of the Charter of the United Nations, and good faith in the fulfilment of the obligations assumed by States in accordance with the Charter,

Affirming that indigenous peoples are equal to all other peoples, while recognizing the right of all peoples to be different, to consider themselves different, and to be respected as such,

Affirming also that all peoples contribute to the diversity and richness of civilizations and cultures, which constitute the common heritage of humankind,

Affirming further that all doctrines, policies and practices based on or advocating superiority of peoples or individuals on the basis of national origin or racial, religious, ethnic or cultural differences are racist, scientifically false, legally invalid, morally condemnable and socially unjust,

Reaffirming that indigenous peoples, in the exercise of their rights, should be free from discrimination of any kind,

Concerned that indigenous peoples have suffered from historic injustices as a result of, inter alia, their colonization and dispossession of their lands, territories and resources, thus preventing them

from exercising, in particular, their right to development in accordance with their own needs and interests,

Recognizing the urgent need to respect and promote the inherent rights of indigenous peoples which derive from their political, economic and social structures and from their cultures, spiritual traditions, histories and philosophies, especially their rights to their lands, territories and resources,

Recognizing also the urgent need to respect and promote the rights of indigenous peoples affirmed in treaties, agreements and other constructive arrangements with States,

Welcoming the fact that indigenous peoples are organizing themselves for political, economic, social and cultural enhancement and in order to bring to an end all forms of discrimination and oppression wherever they occur,

Convinced that control by indigenous peoples over developments affecting them and their lands, territories and resources will enable them to maintain and strengthen their institutions, cultures and traditions, and to promote their development in accordance with their aspirations and needs,

Recognizing that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment,

Emphasizing the contribution of the demilitarization of the lands and territories of indigenous peoples to peace, economic and social progress and development, understanding and friendly relations among nations and peoples of the world,

Recognizing in particular the right of indigenous families and communities to retain shared responsibility for the upbringing, training, education and well-being of their children, consistent with the rights of the child,

Considering that the rights affirmed in treaties, agreements and other constructive arrangements between States and indigenous peoples are, in some situations, matters of international concern, interest, responsibility and character,

Considering also that treaties, agreements and other constructive arrangements, and the relationship they represent, are the basis for a strengthened partnership between indigenous peoples and States,

Acknowledging that the Charter of the United Nations, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, as well as the Vienna Declaration and Programme of Action, affirm the fundamental importance of the right to self-determination of all peoples, by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development,

Bearing in mind that nothing in this Declaration may be used to deny any peoples their right to self-determination, exercised in conformity with international law,

Convinced that the recognition of the rights of indigenous peoples in this Declaration will enhance harmonious and cooperative relations between the State and indigenous peoples, based on principles of justice, democracy, respect for human rights, non-discrimination and good faith,

Encouraging States to comply with and effectively implement all their obligations as they apply to indigenous peoples under international instruments, in particular those related to human rights, in consultation and cooperation with the peoples concerned,

Emphasizing that the United Nations has an important and continuing role to play in promoting and protecting the rights of indigenous peoples,

Believing that this Declaration is a further important step forward for the recognition, promotion and protection of the rights and freedoms of indigenous peoples and in the development of relevant activities of the United Nations system in this field,

Recognizing and reaffirming that indigenous individuals are entitled without discrimination to all human rights recognized in international law, and that indigenous peoples possess collective rights which are indispensable for their existence, well-being and integral development as peoples,

Recognizing that the situation of indigenous peoples varies from region to region and from country to country and that the significance of national and regional particularities and various historical and cultural backgrounds should be taken into consideration,

Solemnly proclaims the following United Nations Declaration on the Rights of Indigenous Peoples as a standard of achievement to be pursued in a spirit of partnership and mutual respect:

Article 1

Indigenous peoples have the right to the full enjoyment, as a collective or as individuals, of all human rights and fundamental freedoms as recognized in the Charter of the United Nations, the Universal Declaration of Human Rights and international human rights law.

Article 2

Indigenous peoples and individuals are free and equal to all other peoples and individuals and have the right to be free from any kind of discrimination, in the exercise of their rights, in particular that based on their indigenous origin or identity.

Article 3

Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

Article 4

Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.

Article 5

Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.

Article 6

Every indigenous individual has the right to a nationality.

Article 7

1. Indigenous individuals have the rights to life, physical and mental integrity, liberty and security of person.

2. Indigenous peoples have the collective right to live in freedom, peace and security as distinct peoples and shall not be subjected to any act of genocide or any other act of violence, including forcibly removing children of the group to another group.

Article 8

1. Indigenous peoples and individuals have the right not to be subjected to forced assimilation or destruction of their culture.
2. States shall provide effective mechanisms for prevention of, and redress for:
 - (a) Any action which has the aim or effect of depriving them of their integrity as distinct peoples, or of their cultural values or ethnic identities;
 - (b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources;
 - (c) Any form of forced population transfer which has the aim or effect of violating or undermining any of their rights;
 - (d) Any form of forced assimilation or integration;
 - (e) Any form of propaganda designed to promote or incite racial or ethnic discrimination directed against them.

Article 9

Indigenous peoples and individuals have the right to belong to an indigenous community or nation, in accordance with the traditions and customs of the community or nation concerned. No discrimination of any kind may arise from the exercise of such a right.

Article 10

Indigenous peoples shall not be forcibly removed from their lands or territories. No relocation shall take place without the free, prior and informed consent of the indigenous peoples concerned and after agreement on just and fair compensation and, where possible, with the option of return.

Article 11

1. Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature.
2. States shall provide redress through effective mechanisms, which may include restitution, developed in conjunction with indigenous peoples, with respect to their cultural, intellectual, religious and spiritual property taken without their free, prior and informed consent or in violation of their laws, traditions and customs.

Article 12

1. Indigenous peoples have the right to manifest, practise, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access in privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains.
2. States shall seek to enable the access and/or repatriation of ceremonial objects and human remains in their possession through fair, transparent and effective mechanisms developed in conjunction with indigenous peoples concerned.

Article 13

1. Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons.

2. States shall take effective measures to ensure that this right is protected and also to ensure that indigenous peoples can understand and be understood in political, legal and administrative proceedings, where necessary through the provision of interpretation or by other appropriate means.

Article 14

1. Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.
2. Indigenous individuals, particularly children, have the right to all levels and forms of education of the State without discrimination.
3. States shall, in conjunction with indigenous peoples, take effective measures, in order for indigenous individuals, particularly children, including those living outside their communities, to have access, when possible, to an education in their own culture and provided in their own language.

Article 15

1. Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information.
2. States shall take effective measures, in consultation and cooperation with the indigenous peoples concerned, to combat prejudice and eliminate discrimination and to promote tolerance, understanding and good relations among indigenous peoples and all other segments of society.

Article 16

1. Indigenous peoples have the right to establish their own media in their own languages and to have access to all forms of non-indigenous media without discrimination.
2. States shall take effective measures to ensure that State-owned media duly reflect indigenous cultural diversity. States, without prejudice to ensuring full freedom of expression, should encourage privately owned media to adequately reflect indigenous cultural diversity.

Article 17

1. Indigenous individuals and peoples have the right to enjoy fully all rights established under applicable international and domestic labour law.
2. States shall in consultation and cooperation with indigenous peoples take specific measures to protect indigenous children from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development, taking into account their special vulnerability and the importance of education for their empowerment.
3. Indigenous individuals have the right not to be subjected to any discriminatory conditions of labour and, inter alia, employment or salary.

Article 18

Indigenous peoples have the right to participate in decision-making in matters which would affect their rights, through representatives chosen by themselves in accordance with their own procedures, as well as to maintain and develop their own indigenous decisionmaking institutions.

Article 19

States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.

Article 20

1. Indigenous peoples have the right to maintain and develop their political, economic and social systems or institutions, to be secure in the enjoyment of their own means of subsistence and development, and to engage freely in all their traditional and other economic activities.
2. Indigenous peoples deprived of their means of subsistence and development are entitled to just and fair redress.

Article 21

1. Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security.
2. States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities.

Article 22

1. Particular attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities in the implementation of this Declaration.
2. States shall take measures, in conjunction with indigenous peoples, to ensure that indigenous women and children enjoy the full protection and guarantees against all forms of violence and discrimination.

Article 23

Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions.

Article 24

1. Indigenous peoples have the right to their traditional medicines and to maintain their health practices, including the conservation of their vital medicinal plants, animals and minerals. Indigenous individuals also have the right to access, without any discrimination, to all social and health services.
2. Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right.

Article 25

Indigenous peoples have the right to maintain and strengthen their distinctive spiritual relationship with their traditionally owned or otherwise occupied and used lands, territories, waters and coastal seas and other resources and to uphold their responsibilities to future generations in this regard.

Article 26

1. Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired.
2. Indigenous peoples have the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired.

3. States shall give legal recognition and protection to these lands, territories and resources. Such recognition shall be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned.

Article 27

States shall establish and implement, in conjunction with indigenous peoples concerned, a fair, independent, impartial, open and transparent process, giving due recognition to indigenous peoples' laws, traditions, customs and land tenure systems, to recognize and adjudicate the rights of indigenous peoples pertaining to their lands, territories and resources, including those which were traditionally owned or otherwise occupied or used. Indigenous peoples shall have the right to participate in this process.

Article 28

1. Indigenous peoples have the right to redress, by means that can include restitution or, when this is not possible, just, fair and equitable compensation, for the lands, territories and resources which they have traditionally owned or otherwise occupied or used, and which have been confiscated, taken, occupied, used or damaged without their free, prior and informed consent.
2. Unless otherwise freely agreed upon by the peoples concerned, compensation shall take the form of lands, territories and resources equal in quality, size and legal status or of monetary compensation or other appropriate redress.

Article 29

1. Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.
2. States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.
3. States shall also take effective measures to ensure, as needed, that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the peoples affected by such materials, are duly implemented.

Article 30

1. Military activities shall not take place in the lands or territories of indigenous peoples, unless justified by a relevant public interest or otherwise freely agreed with or requested by the indigenous peoples concerned.
2. States shall undertake effective consultations with the indigenous peoples concerned, through appropriate procedures and in particular through their representative institutions, prior to using their lands or territories for military activities.

Article 31

1. Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.
2. In conjunction with indigenous peoples, States shall take effective measures to recognize and protect the exercise of these rights.

Article 32

1. Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources.
2. States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.
3. States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

Article 33

1. Indigenous peoples have the right to determine their own identity or membership in accordance with their customs and traditions. This does not impair the right of indigenous individuals to obtain citizenship of the States in which they live.
2. Indigenous peoples have the right to determine the structures and to select the membership of their institutions in accordance with their own procedures.

Article 34

Indigenous peoples have the right to promote, develop and maintain their institutional structures and their distinctive customs, spirituality, traditions, procedures, practices and, in the cases where they exist, juridical systems or customs, in accordance with international human rights standards.

Article 35

Indigenous peoples have the right to determine the responsibilities of individuals to their communities.

Article 36

1. Indigenous peoples, in particular those divided by international borders, have the right to maintain and develop contacts, relations and cooperation, including activities for spiritual, cultural, political, economic and social purposes, with their own members as well as other peoples across borders.
2. States, in consultation and cooperation with indigenous peoples, shall take effective measures to facilitate the exercise and ensure the implementation of this right.

Article 37

1. Indigenous peoples have the right to the recognition, observance and enforcement of treaties, agreements and other constructive arrangements concluded with States or their successors and to have States honour and respect such treaties, agreements and other constructive arrangements.
2. Nothing in this Declaration may be interpreted as diminishing or eliminating the rights of indigenous peoples contained in treaties, agreements and other constructive arrangements.

Article 38

States, in consultation and cooperation with indigenous peoples, shall take the appropriate measures, including legislative measures, to achieve the ends of this Declaration.

Article 39

Indigenous peoples have the right to have access to financial and technical assistance from States and through international cooperation, for the enjoyment of the rights contained in this Declaration.

Article 40

Indigenous peoples have the right to access to and prompt decision through just and fair procedures for the resolution of conflicts and disputes with States or other parties, as well as to effective remedies for all infringements of their individual and collective rights. Such a decision shall give due consideration to the customs, traditions, rules and legal systems of the indigenous peoples concerned and international human rights.

Article 41

The organs and specialized agencies of the United Nations system and other intergovernmental organizations shall contribute to the full realization of the provisions of this Declaration through the mobilization, inter alia, of financial cooperation and technical assistance. Ways and means of ensuring participation of indigenous peoples on issues affecting them shall be established.

Article 42

The United Nations, its bodies, including the Permanent Forum on Indigenous Issues, and specialized agencies, including at the country level, and States shall promote respect for and full application of the provisions of this Declaration and follow up the effectiveness of this Declaration.

Article 43

The rights recognized herein constitute the minimum standards for the survival, dignity and well-being of the indigenous peoples of the world.

Article 44

All the rights and freedoms recognized herein are equally guaranteed to male and female indigenous individuals.

Article 45

Nothing in this Declaration may be construed as diminishing or extinguishing the rights indigenous peoples have now or may acquire in the future.

Article 46

1. Nothing in this Declaration may be interpreted as implying for any State, people, group or person any right to engage in any activity or to perform any act contrary to the Charter of the United Nations or construed as authorizing or encouraging any action which would dismember or impair, totally or in part, the territorial integrity or political unity of sovereign and independent States.
2. In the exercise of the rights enunciated in the present Declaration, human rights and fundamental freedoms of all shall be respected. The exercise of the rights set forth in this Declaration shall be subject only to such limitations as are determined by law and in accordance with international human rights obligations. Any such limitations shall be non-discriminatory and strictly necessary solely for the purpose of securing due recognition and respect for the rights and freedoms of others and for meeting the just and most compelling requirements of a democratic society.
3. The provisions set forth in this Declaration shall be interpreted in accordance with the principles of justice, democracy, respect for human rights, equality, non-discrimination, good governance and good faith.

APPENDIX II: EXISTING ABORIGINAL CONTENT IN NATURAL RESOURCE MANAGEMENT TECHNOLOGY COURSES

UCN Course Name	Description	Learning Outcomes
Tradition and Change: An Aboriginal Perspective	This innovative course introduces students to Aboriginal traditional teachings through the use of sharing circles, group activities and other Aboriginal cultural practices, and by working with traditional and non-traditional teachers. Students will learn about the historical and contemporary issues of Aboriginal people and actively participate in various culturally-based experiences, including a feast.	<i>Not available</i>
Botany	Interrelationship between form and function. Emphasis is placed on plant classification, morphology, plant identification, and ecological associations.	<ol style="list-style-type: none"> 1. Identify plants using a variety of dichotomous taxonomic keys to effectively recognize native and naturalized species of various ecoregions (Boreal forest, parkland, etc) and apply the Forest Ecosystems Classification of Manitoba 2. Compare and contrast the basic types of vegetative and reproductive anatomy, including leaves, stems, roots, flowers and fruits to effectively discuss the diverse and complex nature of plants and their interactions with the environment (abiotic & biotic components) 3. Review and analyze plant classification and nomenclature to effectively recognize and describe the life cycles, botanical characteristics, and economic importance of a range of plant families 4. Review and analyze the traditional plant use of local First Nations to effectively communicate with Aboriginal communities on plant use management, cultural protocols, and traditional ecological knowledge.
General Ecology	This course involves the study of the interrelationships between living organisms and their environment at the individual, population, community, and ecosystem levels. Major topics include ecological systems, abiotic influences on ecosystems, energy flow, biogeochemical cycling, community structure, and succession.	<ol style="list-style-type: none"> 1. Compare and contrast world views of ecology to effectively formulate interaction between people and the environment 2. Evaluate the concepts of evolutionary ecology to determine how adaptation, social behaviour and co-evolution contribute to organism evolution 3. Analyze and review abiotic factors to evaluate influences on the distribution and abundance of organisms 4. Analyze and review the productivity of ecosystems to evaluate the contributions of these functions and productions to organism survival 5. Analyze and review the components of population ecology to evaluate the structure, growth and common interactions between populations 6. Analyze and review the concepts of community ecology to evaluate how structure, succession and theories of climate influence communities
Natural Resource Law Enforcement	This course is designed as a first-level study of law enforcement, which includes all the major areas a natural resource officer will be required to know. It examines the	<ol style="list-style-type: none"> 1. Communicate clearly, concisely, in a timely manner, and correctly in written and verbal form, various topics in the natural resources law enforcement field. 2. Express in written and verbal form an understanding of the various court systems and how various legal

UCN Course Name	Description	Learning Outcomes
	<p>history of the Constitution, which is the ultimate law in Canada, and discusses how laws and law enforcement relate to it. This subject is designed to provide students with a basic understanding of their potential duties in the area of law enforcement and court procedures. The subject covers the most common offences under both provincial and federal statutes, as well as procedures associated with prosecution from field to disposition. Emphasis is placed on the Migratory Birds Convention Act, Wildlife Act (Manitoba), and the Federal Fisheries Act.</p>	<p>documents (acts, regulations, charters, etc.) govern different members of society.</p> <ol style="list-style-type: none"> 3. Read and interpret various statutes and regulations governing natural resources enforcement activities. 4. Using the appropriate authority and power conduct an investigation (including collecting, documenting, and filing relevant and accurate information) leading to competent testimony in court. 5. Interact with others in groups or teams in ways that contribute to effective working relationships and achievements of goals.
<p>Public Relations and Communications</p>	<p>This course and associated activities will help the student gain the skills to effectively communicate and interact with various individuals or groups. Major emphasis will be placed on effective communication using various media, interpersonal skills, and effective listening. Through work in this course and other courses, the student will demonstrate these skills during the second year of the Natural Resource Management Technology program.</p>	<ol style="list-style-type: none"> 1. Communicate clearly, concisely and correctly in written and verbal form on topics in the natural resource field 2. Deliver effective presentations using appropriate communications techniques (ie. Displays, hands-on activities, use of various audio-visual equipment and material, and presentation software) for various audiences 3. Communicate in a manner appropriate for diverse audiences 4. Demonstrate proficiency in interpersonal and group communication techniques 5. To be able to answer impromptu questions with confidence and poise 6. Garner an appreciation for Toastmaster's International 7. Develop communication skills to use in other courses 8. Conduct a job interview 9. Organize tasks and manage time to ensure the successful timely completion of all tasks
<p>Aquatic and Wildlife Ecology</p>	<p>Familiarity with basic ecology will permanently change your world view. You will never again regard plants, microorganisms, and animals (including people) as isolated entities. Paul Ehrlich, Ecologist David Suzuki and Peter Knudtson, in the book Wisdom of the Elders, develop the thesis that both shaman and scientist seem to be using strikingly similar messages about the underlying interconnectedness of all life. To witness the similarity, we must have some understanding of both camps. This course develops an understanding of the principles of ecology as witnessed in aquatic and terrestrial animal species. Students will be introduced to the major concepts of aquatic and wildlife ecology including the basic needs, population dynamics, and behavioral processes. These principles will be reinforced through the study of</p>	<ol style="list-style-type: none"> 1. Clarify and explain hands-on processing in researching, planning, surveying, sampling, coordinating, and implementing methodologies 2. Discuss field oriented data collection and analysis, demonstrate effective verbal/written communication skills, maintain accurate field notes, and complete the writing of a formal scientific summary report to manuscript standards 3. Identify and describe basic features of aquatic ecosystems and normal seasonal and seral fluctuations and changes 4. Discuss, explain, speculate and evaluate basics of terrestrial ecosystems with an outcome of drafting a manuscript report incorporating speculation and evaluation 5. Interact with others in groups or teams in ways that contribute to effective working relationships and achievements of goals 6. Describe and demonstrate the proper techniques utilized in: terrestrial animal surveys (including surveying for grouse and owls), aquatic surveys (use of Kemmer water sampler, Ekman dredge, Wisconsin sampler, Schindler sampler, Surber sampler, Secchi disc, gill nets, trap nets, pound nets, seine nets, electrofishing gear) waterfowl crop depredation prevention, and waterfowl banding 7. Identify sex and age waterfowl and gallinaceous birds. Also, be able to describe techniques used to identify these birds, along with the mating behaviours of the various

UCN Course Name	Description	Learning Outcomes
	representative aquatic and wildlife species. Students will get an opportunity to practice field techniques, bird, mammal, aquatic macrophyte, aquatic invertebrate, and fish identification, data collection, data analysis and report writing.	gallinaceous birds. 8. Describe the habitat various waterfowl, gallinaceous birds, owls, vultures, raptors, fish and mammals occupy, and explain the implications of their interactions with humans 9. Identify and classify with and without the use of keys, Manitoba fish species 10. Identify and classify owls, hawks, eagles, falcons, and vultures 11. Identify aquatic macrophytes, zooplankton, and phytoplankton and describe where they will be found in the aquatic environment along with their function in ecosystems 12. Collect, document and analyze water samples. Also describe why the chemical parameters are at certain levels and implications these levels may have on fish species (i.e. fish kills) and aquatic macroinvertebrates
Natural Resource Law Enforcement 2	This course allows the student to experience ride-alongs with various law enforcement and inspection agencies. As part of the curriculum, the students will be instructed on the various investigation techniques which enable the enforcement agencies to convict violations of provincial legislation. This practicum allows the student to broaden their knowledge on the operations of various justice and inspection agencies. It also allows the student the opportunity to see first-hand the role of the agencies and how they interact with people.	1. Discuss the role of the agency from an enforcement perspective 2. Interact with others in ways that contribute to effective working relationships and achievements of goals 3. Demonstrate the ability to communicate with the public and resource users 4. Demonstrate the various techniques of investigating violations of provincial legislation 5. Discuss the authorities exercised by various agencies and the agencies role within the justice system 6. Discuss the equipment required for effective patrolling 7. Discuss how their studies at University College of the North can be applied to various job positions in the enforcement field.
Environmental Assessment	This course introduces students to the process of environmental planning called environmental assessment. Lectures and group projects will acquaint the student with procedures for conducting an environmental assessment following legislation requirements and guidelines established by Manitoba and federal governments. An assessment project and the course itself are designed to acquaint the students with various key players and agencies involved in the environmental assessment process. Practical activities will provide students the opportunity to apply various tools and methodologies to interpret reports and gather important abiotic and biotic data, to solve natural resource-related problems, and undertake the steps required in conducting an environmental assessment in Manitoba.	1. Describe the evolution and some problems with environmental assessment in Canada 2. Write a proposal to conduct an assessment on a proposed project 3. Collect, analyze, organize and evaluate relevant and necessary information (including traditional ecological knowledge) from a variety of sources to document data and create strategies to alleviate environmental problems 4. Determine whether a project should be reviewed using the provincial (Manitoba) or Federal review process and explain the activities which will be included with this process 5. Interact with peers and people outside the college in a manner that has contributed to effective working relationships and achievement of goals 6. Manage use of time and other resources to attain team project and personal goals 7. Communicate clearly, concisely and correctly in written and verbal form, topics in environmental assessment and apply it to a particular project 8. Adapt to new environmental situations by applying or upgrading his or her knowledge and skills
Park Management	This course introduces park operation and management. Major topics include provincial park	1. Explain the history of national and Manitoba's provincial parks and how it has shaped park creation and management in order to articulate the purpose of parks

UCN Course Name	Description	Learning Outcomes
	<p>systems, the design and operation of park facilities (buildings, day-use areas, over-night areas, and support facilities), park management planning, provincial and federal zoning, and interpretive programs. The relationship between parks and people will be discussed along with the concepts of ecosystem management, preservation, conservation, and accessibility. Exercises involve the design of interpretative trails and campgrounds</p>	<p>and protected areas</p> <ol style="list-style-type: none"> 2. Analyze the conservation and social agendas of parks in order to thoroughly review and carry out park creation, implementation, and management 3. Illustrate the day-to-day operations governed by park management plans in order to effectively prepare for the challenges facing parks personnel 4. Review and analyze the roles and impacts of Aboriginal people on parks and protected areas in order to effectively communicate with Aboriginal communities on park creation, implementation and management

APPENDIX III: POTENTIAL FOR ABORIGINAL CONTENT IN NATURAL RESOURCE MANAGEMENT TECHNOLOGY COURSES

UCN Course Name	Description	Learning Outcomes
Water Resources	Principles of hydrology, water resources management, and conservation will be studied. Content topics include water properties, our Canadian identity-sharing management and research challenges. Basic concepts, field methods and analytical techniques associated with hydrologic cycle, rivers-streams-wetlands- groundwater, and precipitation mechanisms.	<ol style="list-style-type: none"> 1. Define hydrology and the hydrologic ‘cycle’ while developing an introductory conceptual understanding of society’s effect on the hydrologic “process” 2. Quantify watershed and channel characteristics while defending an understanding of the importance of watershed characteristics in controlling water-based effects 3. Estimate both average real rainfall amounts, missing rainfall depths and describe fundamentals of probable maximum precipitation (small mammal research- year 2) 4. Choose, research, write, present and defend a water resource-related essay (i.e. a 5-page technical report, 1-page proposal, 1-page abstract, and a 15 to 20 minutes presentation to the class cohort for open-ended discussion, dialogue and enjoyment) 5. Put into practice skills and knowledge acquired in class while participating in didactic and situated (outdoor) laboratory exercises. Following each activity, the ability to criticize, justify, analyze and report scientific findings in weekly and monthly submitted manuscripts, will without doubt improve participant productivity and understanding
Navigation and GPS	This course will provide the student with the navigational skills required by any of the natural resource disciplines. The student will become skilled in the use of maps, aerial-photographs, compassing, chaining, and GPS (Global Positioning Systems) in relation to navigation. Additionally, they will develop GPS skills related to digital mapping and data collection.	<ol style="list-style-type: none"> 1. Describe geographical locations by township & range, legal subdivision, UTM co-ordinates, and latitude and longitude 2. Use a compass and/or GPS receiver in addition to aerial photographs and/or maps to navigate in forested terrain 3. Interpret aerial photos regarding on-ground surface conditions 4. Establish filed tie-points on a map and/or aerial photograph 5. Explain how GPS technology works and state its limitations 6. Collect GPS data and download and display it in a Geographic Information System 7. Interpret Topographic and FRI maps
Zoology	This course involves a survey of the major animal phyla. The first part of the subject deals with the classification and specification of organisms, and phylogenic relationships. For the remainder of the subject, emphasis is placed on classification, form and function, locomotion, nutrition and reproduction within protozoans, mesozoans, acoelomates, pseudocoelomates, molluscs, arthropods, aquatic and terrestrial mandibulates, fishes, amphibians, reptiles, birds and mammals.	<ol style="list-style-type: none"> 1. Classify animals based on knowledge of the principles of animal taxonomy and characteristics of taxonomic groups 2. Demonstrate an understanding of the structure and function of body systems 3. Demonstrate and understanding of the diversity of animal life and ecological significance of organisms 4. Demonstrate laboratory skills and the understanding of anatomical terminology necessare for biological studies 5. Interact with others in groups or teams in ways that contribute to effective working relationships and achievement of goals
Resource Field Safety and Skills	Natural resources management is a broad field comprised of a variety of disciplines. These disciplines often require employees to carry out field operations in a safe and efficient	<ol style="list-style-type: none"> 1. Analyze and identify common winter hazards to effectively demonstrate proper dress for outdoor fieldwork 2. Analyze and demonstrate wilderness survival skills to effectively prepare for emergency situations that may arise during outdoor field work

UCN Course Name	Description	Learning Outcomes
	manner. This course serves as an overview of the safety and skills needed while working in field situations. As a complement to the theoretical aspects covered, the student will participate in a one-week winter field practicum to be held at the W.R. Burns Field Station, Tramping Lake, Manitoba. The field practicum will test students on outdoor safety and survival, trapper education and problem wildlife, measurement and data collection methods, and the operation and maintenance of relevant tools and equipment. This course will be particularly useful to the student as he/she considers employment options and career choices, and is a prerequisite to the NRMT Fall Field Practicum.	<ol style="list-style-type: none"> Analyze and demonstrate bush-craft skills to effectively accomplish outdoor fieldwork and prepare for emergency situations that might arise during outdoor fieldwork Pass the mandatory trapper education examination provided by Manitoba Conservation Preview and perform basic maintenance, trouble-shooting, and safe operation of snowmobiles, all-terrain vehicles, outboard motors and chainsaws to effectively accomplish fieldwork Demonstrate professional behavior through: exhibiting a level of safety consciousness in all activities; managing time effectively in an organized manner; maintaining personal hygiene; respecting the environment including people and places; maintaining a work area and equipment; being prepared, on time and properly attired for activities; working with others in a positive manner; exhibiting a positive interest level in the natural resources field; completing tasks in a timely manner; showing initiative while on and off scheduled tasks; and Analyze and review forest resource sampling methods to effectively collect data Develop an appreciation for outdoor living activities Increase exposure to career paths in the natural resource management field
Geographic Information Systems	Through hands-on learning of a specific geographic information system, the student will be introduced to geographic information systems and their application to natural resource management.	<ol style="list-style-type: none"> Define and/or explain common GIS terminology Describe ways in which GIS technology is applied in the real world Demonstrate Arc View 9 skills necessary for accessing, editing, and displaying geographic information through GUI Recognize the value of programming scripts
Forestry Practices	The student will investigate the silvics of Manitoba's major forest tree species and apply this knowledge to the development and understanding of harvesting and silvicultural forest management practices applicable to Manitoba's forest landscape. The student will develop skills required for the collection of datum support necessary for the management decision-making process through hands-on activities.	<ol style="list-style-type: none"> Utilise silvical knowledge of the common forest trees in prescribing forestry operations suitable to the forest ecosystem and forest management goals Determine the scaled volume of a pile of logs Describe and apply basic field methodologies for common forest mensurational activities Recognise commonly used forestry equipment Recognise common forest health problems Understand fire behavior theory and how it relates to the prediction, control, and use of forest fires Define common forestry terms and explain the historical development of forestry
Fall Field Camp	NRMT Fall Field Practicum is a practical field component for a variety of core courses within the program. Held off-campus at a bush camp in the boreal forest north of The Pas, the field camp agenda includes practical, hands-on training, fieldwork and data collection in areas of aquatic and wildlife management, and forest and timber management. Typical activities within the field camp include survival training and exercise, reforestation surveying, lake and stream ecology studies, gill-netting and fish sampling, and small mammal trapping, among others. Principles of integrated resource management and sustainable, ecosystem-based	<ol style="list-style-type: none"> Biological Studies <ul style="list-style-type: none"> Collect data in an accurate and ethical manner Properly utilize, test, and maintain equipment to perform biological studies Report verbally and/or demonstrate how and why select biological surveys are performed Report verbally the results or anticipated results of select biological surveys Field Notebook <ul style="list-style-type: none"> Record and maintain field notes containing all necessary or relevant data required to document field studies Boat Operation <ul style="list-style-type: none"> List and identify equipment required on a vessel Identify and troubleshoot common boat/motor related problems Competently operate a boat in a safe manner Land and moor boat effectively Survival

UCN Course Name	Description	Learning Outcomes
	management are reinforced with the camp exercises. The three-week, live-in camp experience also gives students exposure to the requirements and responsibilities of bush camp life as it may be encountered in future career situations.	<ul style="list-style-type: none"> • Build a safe and effective warming fire • Build a safe and effective signal fire • Build a safe and effective survival shelter from natural (forest debris) materials (suitable location, construction material, orientation, size) • Build an effective survival bed (sleeping platform, material and construction) <p>5. Work Habits and Attitudes</p> <ul style="list-style-type: none"> • Demonstrating a level of safety consciousness in all activities • Managing time effectively in an organized manner • Maintaining personal hygiene • Respecting their environment including people and places • Demonstrating a positive interest level in the natural resources field • Being prepared, on time and properly attired for activities • Working with others in a positive manner • Showing initiative while on and off scheduled tasks
Fisheries Management	Fisheries Management introduces both historic and present techniques while identifying regionally specific knowledge, skill sets and attitudes. Emphasis on the relationships of life history information to management, age and growth, fecundity, fish population estimation and habitat improvement, create vision and values. Communicating through public speaking, writing brochures and other media, along with preparing scientific reports will enhance individual competency required by many organizations.	<ol style="list-style-type: none"> 1. Identify common regional game fish species, related habitat components, and nutritional requirements following capture techniques explored in UC RRR 2100 and UC RRR 2330 during Fall Field Practicum exercises 2. Estimate and describe sampling and measuring considerations of length, weight, and associated structural indices in basic descriptive statistical technique methodologies 3. Determine fish age and condition factors within given territories, identifying factors favouring rational exploitation, and assess the potential for fishing activities 4. Collect, identify, quantitatively describe, analyze and interpret diet components 5. Report, analyze and summarize original findings from the field and laboratory investigations in complete, lucid and proper research/scientific report formatting
Wildlife Management	This module introduces wildlife management techniques while having the critical challenge in building value within the discipline. Emphasis on techniques relates to population estimation, food availability, food habits, food evaluation, and the management of ungulates, waterfowl, upland game birds, fur-bearers, and problem wildlife. At this level, the student will gain sufficient skill to independently resolve most field situations, perform resource protection duties and gather resource user data.	<ol style="list-style-type: none"> 1. Design, schematize and defend both in writing and verbally, a personal argument for wildlife management, conservation and/or preservation principles (Position Papers – you instructor will provide an initial class example of a published journal article) 2. Measure abiotic and biotic characteristics of terrestrial environments (fall practicum). 3. Interpret terrestrial ungulate, small mammal, fish and gallinaceous condition factors and habitat suitability, analyze and summarize data within tables, figures, maps, and plates, and develop a lucid wildlife manuscript/report (scientific writing standards) 4. Choose, create and present a wildlife-related public relations display for an elementary, secondary student body, or public group, making management recommendations and listening to all other stakeholder concerns via presentations or poster board display. 5. Distinguish between responsible and abusive ‘stewardship’ of the environment describing how a high degree of specialization in a species makes it more vulnerable to extinction 6. Speculate on the importance of human ethics in maintaining natural space and species