

# APF Net Curriculum 1

## Sustainable Forest Management in a Changing World

### Course Syllabus

Semester Year

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<b>Course Title:</b>	Sustainable Forest Management in a Changing World
<b>Credits:</b>	3 credits
<b>Instructor Name:</b>	Dr. John L Innes
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### Course Description

The course provides an overview of the criteria and indicators that are used worldwide to guide sustainable forest management practices and explains how these will vary in a changing climate. It examines the evolution of sustainable forest management, particularly in relation to internationally agreed criteria of sustainable forest management. It adds to this discussion by looking at forest management through the lens of climate change. This is an important component of today's forest management, made critical by the relatively long rotation times associated with the growth of forests. Rotation times vary tremendously: from a few years in the Tropics for some plantation forests to more than 100 years in the boreal forests of North America, Europe and Russia.

This course is designed for Master's level students studying forest management and for advanced-level undergraduates. It assumes a basic understanding in a range of disciplines, but in recognition that not everyone taking the course will have this knowledge, links are provided to sources of further information.

### Course Format

This course is designed to be taken as an open, online course. The resources can be accessed by anyone at anytime. Participants will learn through a self-directed learning approach; there are no course activities and communications.

## Course Objectives

The course will introduce you to the seven main criteria that define how forests should be managed. These are:

- Conservation of biological diversity
- Maintenance of the productive capacity of forest ecosystems
- Maintenance of forest ecosystem health and vitality
- Conservation and maintenance of soil and water resources
- Maintenance of forest contribution to global carbon cycles
- Maintenance and enhancement of long-term multiple socio-economic benefits
- Legal, institutional and economic framework for forest conservation and sustainable management

The first six of these criteria define the core aims of sustainable forest management, and the seventh outlines the necessary conditions that must be present in a country if sustainable forest management is to succeed.

By the end of this course, you should be able to:

- Explain the principles of sustainable forest management.
- Apply the principles of sustainable forest management within the context of climate change.
- Compare and assess the major components of sustainable forest management.
- Analyze and solve the complex problems faced by modern forest managers.

## Course Materials

### Required Textbook

There is a textbook that accompanies this course. The title is:

Innes, J., & Tikina, A. (Eds.). (2016). *Sustainable forest management: From principles to practice*. London: Earthscan Publications. ISBN: 1844077241

There is a wide range of other textbooks that are aimed at specific parts of this course. These are referred to in the individual topics.

### Supplementary Readings

You will be expected to read a considerable amount of supplementary material. This is referred to in the individual topics.

## Course Schedule

As this is an online course, you can complete the topics and modules at your own pace. The speed at which you progress through the course will depend on a number of factors, including how well you can understand English, how much you already know about forest management, and how familiar you with the materials.

Start Week	Module/Unit	Core Ideas	Learning Activities
<b>Module 1 Forest Management - Origin and Organization</b>			
<b>1</b>	<b>Module 1 Topic 1</b> Origins of Sustainable Forest Management	TBD	Review course introduction and overview materials. Read background information Watch online video lectures Investigate further resources Take topic 1 self-test.
	<b>Module 1 Topic 2</b> A Canadian Variation	TBD	Read introduction and background information Watch online video lectures Investigate further resources Take topic 2 self-test
<b>2</b>	<b>Module 1 Topic 3</b> ITTO's Sustainable Forest Management Principles	TBD	Read introduction and background information Watch online video lectures Investigate further resources Take topic 3 self-test
	<b>Module 1 Topic 4</b> The Montreal Process	TBD	Read introduction and background information Watch online video lectures Investigate further resources Take topic 4 self-test Take Module 1 self-test
<b>Module 2: Criteria and Indicators of Sustainable Forest Management 1</b>			
<b>3</b>	<b>Module 2 Topic 1</b> Conservation of Biological Diversity	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 1 self-test
<b>4</b>	<b>Module 2 Topic 2</b> Maintenance of Forest Health	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 2 self-test Take Module 2 self-test

<b>Module 3: Criteria and Indicators of Sustainable Forest Management 2</b>			
<b>5</b>	<b>Module 3 Topic 1</b> Soil Development	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 1 self-test
<b>6</b>	<b>Module 3 Topic 2</b> The Protection of Soils	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 2 self-test
<b>7</b>	<b>Module 3 Topic 3</b> The Hydrological Functions of Forest	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 3 self-test
<b>8</b>	<b>Module 3 Topic 4</b> Indicators of Soil and Water Conservation	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 4 self-test Take Module 3 self-test
<b>Module 4: Criteria and Indicators of Sustainable Forest Management 3</b>			
<b>9</b>	<b>Module 4 Topic 1</b> Maintenance of Forest Ecosystem Productivity	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 1 self-test
<b>10</b>	<b>Module 4 Topic 2</b> Maintenance of Forests' Contribution to Global Carbon Budgets	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 2 self-test Take Module 4 self-test
<b>Module 5: The Social, Economic and Cultural Aspects of SFM, and the Legal Basis for Managing Forest Sustainably</b>			
<b>11</b>	<b>Module 5 Topic 1</b> Indicators Used in Monitoring the Economic, Social and Spiritual Values Associated with Forests	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 1 self-test
<b>12</b>	<b>Module 5 Topic 2</b> Forest Governance and Rights	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 2 self-test Take Module 5 self-test
<b>Module 6: Putting Sustainable Forest Management into Practice</b>			

<b>13</b>	<b>Module 6 Topic 1</b> Writing a Forest Management Plan	TBD	Read introduction information Watch online video lectures Investigate resources
<b>14</b>	<b>Module 6 Topic 2</b> Certification of Forest Management	TBD	Read introduction information Watch online video lectures Investigate resources Take topic 2 self-test

## Course Structure

The course is organized in six Modules and each is comprised of two to six topics. Each module typically consists of introduction, online video lectures, resources, and a self-test.

Module 1 Forest Management - Origin and Organization

Topic 1: Origins of Sustainable Forest Management

Topic 2: A Canadian Variation

Topic 3: ITTO's Sustainable Forest Management Principles

Topic 4: The Montreal Process

Module 2: Criteria and Indicators of Sustainable Forest Management 1

Topic 1: Conservation of Biological Diversity

Topic 2: Maintenance of Forest Health

Module 3: Criteria and Indicators of Sustainable Forest Management 2

Topic 1: Soil Development

Topic 2: The Protection of Soils

Topic 3: The Hydrological Functions of Forest

Topic 4: Indicators of Soil and Water Conservation

Module 4: Criteria and Indicators of Sustainable Forest Management 3

Topic 1: Maintenance of Forest Ecosystem Productivity

Topic 2: Maintenance of Forests' Contribution to Global Carbon Budgets

Module 5: The Social, Economic and Cultural Aspects of SFM, and the Legal Basis for Managing Forest Sustainably

Topic 1: Indicators Used in Monitoring the Economic, Social and Spiritual Values Associated with Forests

Topic 2: Forest Governance and Rights

Module 6: Putting Sustainable Forest Management into Practice

Topic 1: Writing a Forest Management Plan

## Topic 2: Certification of Forest Management

Students taking this course should work through the course methodically. You are strongly advised to study the topics in the order that they are presented, but bear in mind that it is always possible to return to particular topics to study them in greater detail.

### **Student Evaluation**

As this course is taken independently, you will not gain any official credits. You can assess your learning and understanding of the material through the self-administered quizzes that you will find associated with each module.

### **Technical Requirements**

There are no special technical requirements for taking this course other than being able to access Internet.