



Master of International Forestry (MIF) Program – proposed course curricula

The Faculty of Forestry at the University of British Columbia (UBC) at Vancouver, Canada, intends to offer a new Master of International Forestry (MIF) program beginning in August 2015. This one-year residential program will consist of eight courses aimed at the development and enhancement of skills for resource management, conservation and policy professionals. The overall purpose of the MIF program is to teach students how to understand and deal with the points of view of, and pressures on, decision makers who have responsibility for renewable natural resources and how to influence them especially on forest-related matters. The UBC Faculty of Forestry aims to produce graduates who are 'agents of change and innovation'.

The four sessions of the MIF program are –

► an on-arrival pre-term set of two weeks of knowledge-upgrading lectures, video films and seminars on global forestry.

► a Fall/Winter 2015 term of class lectures, seminars and group work, with possibilities of individual directed studies. Planned courses are:

- ECON - Natural resources economics – how to estimate the sovereign wealth of natural assets;
- INST - Development of forest institutions – how to run a government agency or major commercial enterprise;
- POLI - Forest policy development and Law – how to develop and rationalize options for multiple benefits.

► a Spring 2016 term of class lectures, seminars and group work, with possibilities of individual directed studies. Planned courses are:

- BUSI - Forest business enterprise – how to make money from trees;
- PLAN - Natural resources planning – how to optimize sustainable benefits from Nature's Bounty;
- SOCI - Social, community and indigenous forestry – how communities on their own can manage trees and other forest resources.

The course on GOVE - Forest governance – how to negotiate control and share benefits from trees and forests - will be spread over the two terms.



Linked pages give the contents of the proposed modules which may comprise the weekly core of each of the seven courses. UBC Forestry expects to include, in due course, brief information about the potential instructors for each module.

► a Summer term 2016 of group work projects or internships or directed studies in specialization/supplementary coursework, May-July 2016.

The degree is designed for domestic Canadian and international graduates of social science and science-based bachelor degree programs but is open also to graduates from other disciplines who are seeking to switch careers into the international forestry arena. Admission will be competitive. Preference will be given to applicants with 5-10 years' experience of paid or volunteer employment in natural resources conservation and management.

UBC Forestry anticipates that students graduating from the MIF program will be seeking employment in UN agencies, international finance institutions such as the World Bank and regional development banks, transnational forest products enterprises, and international environmental NGOs, international offices of national institutions such as government ministries, or accelerated promotion in their own organizations.

The MIF program is currently going through the final UBC approval process. More formal advertisement will follow completion of that process, including full details of the eligibility criteria and application process for admission to the MIF program. The website will also have substantial sets of pages to aid Canadian domestic students and international students. The pages for international students will include guidance on necessary pre-arrival actions, such as obtaining study permits and temporary resident visas, finding housing, opportunities for recreation, arranging bank accounts and transferring funds, and arranging health insurance.

Web pages will link to the standard information provided by Graduate Student Services in the UBC Faculty of Forestry.

In the meantime, UBC Forestry invites expression of interest from prospective students, enclosing short CVs of their academic qualifications and employment record. Please send your summary and attachments to the MIF program coordinator, e-mail john.palmer@ubc.ca. More details, including the formal student application process, will be posted progressively to the MIF section of the UBC Forestry website. Prospective students who register their interests will then be informed automatically as the MIF web pages are updated.

This advertisement is issued without any explicit or implicit legal commitment by UBC Forestry that the MIF program will be offered as or when mentioned above; that will depend on the UBC approval process. Updated August 2013



Delivery will be mainly through two 2-hour lecture sessions and one 2-hour seminar/lab/group work session each week, for each of the proposed seven taught courses. In each course, there should be possibilities of individual directed studies. Most of the courses require the preparation of special studies or term papers, as individual or team-work contributions.

FRST 560 – BUSI - Forest business enterprise – how to make money from trees

1. Why forest-related enterprises in developing countries are more difficult to establish and fail so often; an overview of common business problems at family, community and commercial levels.
2. Principles of business management and the roles which a manager performs within a public or private enterprise.
3. Theory of the firm – textbook versus social norms for business; identifying and overcoming obstacles; recognizing and managing corruption.
4. Markets - identifying, developing and defending markets; intelligence and advertising; countering unfair and illegal competition including illegal harvesting. Developing and conducting business promotion through trade fairs and expositions; securing government contracts; using the national building codes; developing and marketing non-traditional products, qualities and quantities; dealing with market queens; engaging in 'green marketing' locally, nationally and internationally including through web-based markets.
5. Financing a forest enterprise – financial statement development and coordination; business control and planning including profitability, efficiency, liquidity, & solvency analysis; review choice of accounting methods to advise enterprises, internal audits and simple taxes (such as property and sales).
6. Managing the special characteristics of natural-resources-related businesses; such as seasonality, imprecise inventory of raw materials, uncertain estimates of fluxes of raw materials, diverse but relatively low-value and easily-copied products. Overcoming disadvantages of small enterprises – differentiation and specialization; sharecropping, component supply, cooperatives, trade associations, joint ventures.
7. Midterm examination
8. The commercial banking system - role of financial institutions with emphasis on one's country of residence; assessment of the use of debt versus equity for capital purchases; terms required to secure credit and raise loans for capital investment; capital budgeting



applications required to examine investment decision-making. Understanding commercial law in one's country of residence.

9. Risk management & decision making – identifying sources of business and financial risk; integrating risk and decision making; frameworks to identify and strategize regarding risk-management options.

10. Theories of investment in natural resources in developing countries and practices of investment-support agencies; how to use the OECD guidelines for multi-national companies; how to develop and operate a Foreign Direct Investment agreement; how to engage with an Export Credit Guarantee Agency; how to obtain and use other business insurances; how to establish and operate a joint-venture company.

11. Monitoring and evaluation of progress against objectives at the enterprise level. This will be taught in relation to management of water catchments.

ENDS

FRST 534 – ECON - Natural resources economics – how to estimate the sovereign wealth of natural assets

1. The need for economic analyses to guide decision-making. Tools of the trade covered in this course. Some examples of applications.

2. Valuation as a key input into natural resources policies, applying appropriately the range of methods for valuing economic benefits from NR, especially trees and forests; total economic value of ecosystems and biodiversity (TEEB) and total economic value (TEV); resource rent.

3. Dealing with externalities, politics of conversion into internal costs. Risk management including dealing with political instability.

4. Applying macro- and micro-economic theory to planning and management in forestry and forest industries, price mechanisms, concept of utility.

5. Social cost-benefit analysis.

6. Time-discounting (NPV), inflation, currency movements, and choosing between long-term and short-term investment options, scale effects, depletion rates.

7. Mid-term examination.

8. Trading-off between multiple outputs of goods and services (will be taken up again during the Spring term course FRST 558 (international version) on Natural resources planning).



Ownership, valuing and marketing tangible and intangible products and services; payments for environmental services - PES; forest carbon including REDD+; funding forest-based conservation. PES will recur in various parts of the MIF program.

9. Differentiating between poverty traps and social safety nets in forest-based livelihoods, income re-distribution (based on lecture V in FRST 554). Regulation and taxation in theory and in practice, setting and collecting NR-based taxes, investment subsidies and technical aids, anti-corruption pacts.

10. Economics of water and watershed management. Monitoring and evaluation of progress against regional development objectives set for whole or parts of landscapes or watersheds (to be taught by instructor from Faculty of Land and Food Systems, based on FRE 540).

11. Understanding international trading systems and their evolution for forest products and services; development and operation of market incentive schemes; price stabilizers; non-tariff barriers; quality assurance schemes including forest certification and ISO; legality verification schemes and Customs laws and regulations; shipping port procedures for exports including containerisation; international sales contracts; Customs international harmonized product codes. Effects of trade liberalization and barriers; WTO; free trade agreements; EU FLEGT and US Lacey Act (cross-refer to INST and POLI); (softwood lumber wars between Canada and USA?).

ENDS

FRST 553 – GOVE - Forest governance – how to negotiate control and share benefits from trees and forests

1. Modern government – competition and collaboration across agencies within and on the periphery of government, exemplified by integrated land use planning (ILUP) and anti-corruption measures; decentralization and deconcentration.
2. National forest service in a unitary State and in a federation of States, managing regional forestry entities (networks).
3. Managing overlapping claims and rights, historical and inter-sectoral, to forest resources; resource planning for scales, intensities and durations of different forest-based industries; needs of indigenous peoples and forest-dependent communities; spatially clumped or dispersed activities; high and low impacts; risk assessment and management.
4. Government working with private-sector forest industries; strategic planning to accommodate national policies and laws; fair competition; fair rate of return; avoiding elite capture; anti-corruption at multiple levels.



5. Working in failed or failing States, managing when corruption is endemic, identifying power structures, understanding the nomenclature, assessing cooperators and opponents, creating and implementing ethical standards, working towards a rule of law.
6. Working constructively and comfortably with the Media – Press, radio, TV, and social media. Should include training in preparation and delivery of oral arguments, and management of oral debate, as well as poster design and production.
7. Mid-term examination.
8. Political aspects of national forest services; operating inside and outside civil services, semi-autonomous agencies; inter-departmental cooperation and coordination; managing political direction; formulating and advising on policy; management of parliament and sectoral or select committees; briefing Ministers and giving parliamentary evidence; lobbying and managing pressures by lobbies; working with ENGOs and Indigenous Peoples and other civil society entities.
9. Understanding the evolution of donor policies and practices; making productive the relationships with donor governments and agencies (including international finance institutions); collaboration without distortion of (negative effects on) the approved national strategic plans; working the triangle (donor/ government/civil society).
10. Dispute resolution procedures; complaints and appeals. Developing and operating, or working with, social and community development NGOs.
11. Professional compliance with defined standards of operation. Professional ethics, accredited associations, formulation of professional positions and ethical political lobbying.

ENDS

FRST 542 – INST - Development of forest institutions – how to run a government agency or major commercial enterprise

1. Plan, develop and operate a national or sub-national government forest service or government-owned forest development corporation; governance of the national forest service; processes for adapting civil service structures to modern and evolving functions.
2. Strategic planning from policies and laws and precedents; scenario building and testing, monitoring, evaluation and feedback. Data management – identifying relevant data sets, locating hidden data, retrieving, managing, safeguarding, archiving, disseminating critical data. Histories and grey literature, maps and GIS layers and remotely sensed imagery.



3. Human resources management in a government service; structures and grades for multiple functions; entry qualifications and exams; treatment of gender issues; working with local traditions for promotion by preferment, merit or by Buggins' turn; efficiency bars; incentives for self-advancement and improvement; legal training; language training; revenue administration; discipline; communication and reporting; dealing with health and safety issues; employer-employee and inter-employee relations; dispute management. Training needs analysis, and provision for continuous education/training.
4. Developing and using Standard Operating Procedures for efficiency of routine administration but avoiding fossilization; internal and external audits; making best use of external advisory bodies and independent reviewers; cross-refer to PLAN.
5. Nationally-administered forests as a source of government revenue; holistic and product valuation systems; setting rates for resource access taxes, royalties and rents; indexation; operating a forest revenue system; collection of taxes; recovery of costs; treatment of surpluses; access and benefit sharing; multiple claimants and rights holders; Customs administration, export systems and controls, taxation, licences, records and reports.
6. Developing and operating forest concession systems; tenures; auctions; durations; renewals, extensions, suspensions and cancellations; transaction costs; management of contractors; special features of no-harvest concessions and environmental services (wildlife management, biodiversity and habitat conservation including fisheries, soil stabilization and other protections, recreation and tourism, water supplies for domestic and industrial consumption; forest carbon sequestration and trading).
7. Mid-term examination.
8. Penalties for forest offences; kinds of offences; rationales for setting penalties, including compounding; revising penalty rates; anti-corruption measures; mediation and other non-court solutions for disputes about alleged offences; how to prosecute in court; penalties in subsistence societies; reporting.
9. Traditional functions of forest services in environmental protection; fire, flood, storm; forest health, control of pests and diseases and invasive organisms; pollution control; soil stabilization (control of erosion and sedimentation); inter-agency coordination; in-house activities or contracted out; emergency services before, during and after disasters.
10. Operating a government or private sector forestry extension service; defining/limiting the clients; seed supply; plant provision; restoration; conservation; fire management; technical advice and support; communications; full-service land care companies; legal limits on liabilities
11. Developing and operating an international forest-related consultancy; cultural sensitivity without losing professional standards; developing terms of reference, identifying real objectives of clients, conducting interviews, participatory consultations, feedback to



consultants and clients, working with forest-dependent communities including indigenous peoples and traditional peoples. Working as a singleton consultant compared with working for a consultancy company.

12. Project management cycle, logical frameworks.

ENDS

FRST 559 - Natural resources planning – how to optimize sustainable benefits from Nature's Bounty

1. Assessing the economic, environmental, social, cultural and political importance of natural resources nationally or sub-nationally through cross-sectional or longitudinal surveys, including forest inventories.
2. Assessing the monetary and non-monetary value of goods and services provided by natural resources nationally or sub-nationally; choice of valuation systems.
3. Comparing and contrasting the trade-offs between competing natural resources from the points of view of government, private sector and local communities, including forest-dependent communities and indigenous peoples; conducting participatory consultations and managing disputes to optimize satisfaction among competing stakeholders in natural resources management.
4. Integrated planning for management of natural resources for maximum net social benefit; integrated land-use planning.
5. Using, or commissioning the use of, predictive models of future production and consumption of natural resources nationally or sub-nationally; selecting independent data sets to check the validity of the models; assessing accuracy and precision of predictions for the range of goods and services; triangulating and making quantitative comparisons between the different models.
6. Conducting risk assessments and managing risks for a variety of natural resources production schemes and scenarios.
7. Mid-term examination.
8. Predicting and estimating external changes in the environmental, economic and social contexts over time.
9. Combining the above-listed skills (weeks 1-6 and 8) to undertake strategic planning in a national / government or sub-national / private sector context.



10. Co-managing adaptively for forest (habitat and biodiversity) resilience to cope with external changes - economic, environmental and social.
11. Developing and using Standard Operating Procedures to minimize administrative costs of routine management of natural resources.
12. Developing and providing briefs on natural resources production at national level for regional and international trade negotiators. Comparing regional within-country and between-country trading patterns in natural resources.
13. Understanding and evaluating critically the pros and cons of forest certification (for sustainable forest management and chain of custody); principles of the development and revision of international (soft law) forest certification standards; adaptation and application of forest certification at national and sub-national levels; and performance audits. Comparing between schemes for voluntary, independent, third-party certification. Differentiating from essentially statistical reporting frameworks such as Helsinki and Montreal Criteria and Indicator processes.

ENDS

FRST 542 - Forest policy development and Law – how to develop and rationalize options for multiple benefits

1. Understanding the internal and external functions of local and national single-sector policy (such as fisheries, forestry, mining, tourism and wildlife); implementing and adapting the policies.
2. Developing and applying national integrated land use (resource use) planning; scenario building and testing.
3. Applying the precautionary principle in development and management of natural resources (renewable and non-renewable).
4. Analysing, developing and promoting policy advice to political decision-takers; preparation of policy briefs; working with parliamentary sectoral and select committees.
5. Legal drafting of laws and regulations, including participatory processes, and the parliamentary process for enactment. [should the MIF program require students to develop a sample forest-related law or regulation?]
6. Analysing, developing and promoting legislation for parliament, and regulations for Ministers. Working in countries with technically defective, incomplete, contradictory and unharmonised laws and regulations.



7. Mid-term examination.
8. Analysing, developing and organizing campaigns for ENGOs. Developing and operating, or working with, social and community development NGOs; cross-refer to GOVE.
9. Analysing, developing and negotiating multi-lateral environmental agreements (MEAs) at regional treaty and UN levels [but not trade negotiations which are too specialized for the MIF program].
10. Detecting, preventing and prosecuting to conviction illegal activities such as unauthorized harvesting and trade in forest products. Developing and implementing legality verification schemes (LVS) adequate to meet the requirements of EU Voluntary Partnership Agreements and EU Timber Regulation (EUTR) and the US Lacey Act; cross-refer to ECON and INST.
11. Developing and promoting corporate social and environmental responsibility, including measures against multi-level corruption, in management of natural resources. Combatting illegal, unreported and unregulated fishing (IUU).

ENDS

FRST 522 - Social, community and indigenous forestry – how communities on their own can manage trees and other forest resources

1. Land security – assemble and present verifiable evidence for customary rights, occupation and traditional usufruct; understand adat; use national constitutions and international human rights conventions in support of arguments for legally-recognised tenure, deal with overlapping claims between different levels of stakeholder.
2. Internal community organization - legally-recognised constitution and governance, manage internal factions and historical disputes, adat, bookkeeping and accounting, audits and public reports, conflict management and dispute resolution, representation and publicity.
3. External community organisation - manage relations with neighbouring communities and government agencies and vote-seeking politicians; control of illegal harvests in forests, fisheries and mining; manage asymmetries in information, power and influence; choose the topics and the timing; capture attention and manage relations with representative and intermediary NGOs and with donor agencies.
4. Joint forest management / co-management with government agencies. Record, understand and interpret traditional/customary rights of rural communities including indigenous peoples; operational integration of these rights and customs with statute



(parliamentary) laws and regulations and procedures for rural development. Design and use of conflict management/resolution procedures to address non-criminal forest-related disputes, to avoid expensive court cases; cross-refer to INST – the MIF course on Institutional development.

5. Community development– identify and assess common-pool resources, develop and evaluate management options, adjust for seasonally-varying products and workloads and cultural preferences, assess human capacities to manage common-pool resources, multi-generational culturally-adjusted student-centred training, systems for setting and revising priorities, secure community agreement/endorsement of selected options and priorities.
6. Empower and monitor user groups, share rights and responsibilities, manage gender issues, ensure benefit-sharing from community resources, prevent or minimize elite capture, work within the community or contract-out operations.
7. Review sessions and mid-term examination.
8. Potential markets for community products - identify potential markets for community products through internal and external market surveys, obtaining and using expert help, developing marketing plans, finding uses and markets for second-grade products, contacting market operators, developing or using brands, packaging and labelling and advertising, quality control and dealing with complaints and rejections, pooling resources to reduce costs and expand opportunities.
9. Securing credit for trade, banking and accounting and managing wealth accumulation for re-investment, Fair Trade options and 'green' markets.
10. Identify and manage threats and opportunities – SWOT analysis (strengths, weaknesses, opportunities and threats), dangers of government re-centralisation of controls over common-pool resources, the special pros and cons of payment for environmental services including REDD+ at community level.
11. Special rights and responsibilities, challenges and opportunities for indigenous peoples – geographic displacement and economic marginalization, lack of legal recognition, lop-sided legislation, sustaining languages and cultures, addressing adaptation to climate change.

ENDS