University of Northern British Columbia

NATURAL RESOURCES PLANNING (NREM 400) – Winter 2012

Course Syllabus

Instructor: **Dr. Chris Johnson**
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Office: 8-215
Office hours: Wednesday 1:00-2:00

Class Meeting Rooms and Timing
Lecture room: 10-4520
Lecture time: Monday & Wednesday 11:30-12:50
Lab room: 8-127
Lab time: Monday 3:00-5:50

Course Description
Planning for the long-term use and conservation of the environment is an inherently interdisciplinary process and a major element of natural resources management. Given the wide range of values and the potential for conflict, natural resource professionals in this field draw from a broad range of knowledge and techniques in both the social and natural sciences. This is a one-semester course, thus, we cannot fully consider all of the elements of natural resourced planning. However, we will work together to expose many of the fundamental concepts, ideas, and skills you will require when entering the planning arena. Although I expect participants to be aware of the contemporary planning initiatives, legislation, and techniques we discuss in class, the take-home message should be an appreciation for the underlying ideas. Inevitably, legislation will change; where the details and specifics are lost, the fundamental elements of resource planning will continue to serve as the framework for future planning initiatives.

Students come to this course primarily with majors in Forest Ecology and Management, Wildlife and Fisheries, Outdoor Recreation and Conservation, and Natural Resources Planning. Recognising this diverse range of interests and backgrounds, we will consider a full range of values and planning processes from a BC, national, and international perspective. The course is lecture based with a lab more focussed on participatory learning. However, I strongly encourage discussion and interaction within all components of the course. Through group work in the labs and discussion during lecture, we will have an opportunity to learn from each other the techniques and foci inherent to our individual disciplinary training.

Much of planning is about working together productively to achieve shared objectives. This often will require an appreciation or respect for alternative world views and values, some of which you might not share. Consistent with the profession, this course will force you into group situations where productive and respectful working relationships with fellow students will be the key to success.

The course is structured into a series of topics that will be approached through lecture and accompanying lab work. Where possible, labs will reinforce lecture topics and provide students an opportunity for "hands-on" problem-based learning. On a number of occasions, guest lecturers will join us in the classroom to speak about their experiences as natural resource planners and professionals.

The learning objectives for the course are:

- understanding of the generic components of the planning process;
- appreciation for a range of resource values from various cultural and socioeconomic perspectives;
- familiarity with some BC and Canadian policy and legislation that influences natural resources planning;
- working knowledge of the intent, strengths, and weaknesses of some planning approaches;
- familiarity with common data and methods used for conducting natural resources planning; and
- ability to prepare and defend a strategic plan that recognises and accommodates a range of natural resources.

Evaluation

This course has a final exam and a midterm. Assignments are progressive leading to the written submission and oral presentation of a natural resources plan. Much of the work will be conducted in groups. To facilitate a mixing of disciplines and ideas I will randomly generate group placements.

Assignment	Grade	Distribution	Due Date
GIS lab #1 – Learning spatial data	2	Individual	Jan 16
GIS lab #2 – Joining and querying data	2	Individual	Jan 30
GIS lab #3 – Spatial buffers and cartography	2	Individual	Feb 13
GIS lab #4 – HSI and corridors	3.5	Individual	Feb 27
Representing aboriginal values in plans	3.5	Individual	Mar 5
Timber planning	3.5	Individual	Mar 19
Participation: ask one intelligent question of a guest lecturer	0.15	Individual	Guest lectures/ presentations
Critique of planning process/concept	3	Individual	Mar 26
Midterm Exam	18	Individual	Feb 15
Final Exam	33	Individual	TBA
Outline of your planning process, goals, and objectives	1.25	Group	Feb 13
Written submission of resource plan	21.1	Group	Apr 2
Poster presentation of plan	4	Group	Apr 2
Presentation and defence of plan	3	Group	Mar 2

Expectations
For this class to succeed, we must all cooperate. I will provide the structure, atmosphere, and learning material that will stimulate and challenge you to grow intellectually within the context of the course objectives, and hopefully beyond. However, learning and ultimately success will be impeded if you fail to contribute and work fairly with other participants in this class. Peer review will serve as one component of your grade, so please attend group meetings and work hard to fulfill your commitments.

I expect all assignments to be turned in by 4:30 on the day they are due. Late assignments will be penalized 10%/day up to a maximum of 50%, after which a grade of 0 will be assigned. Unless confronted by unexpected circumstances I will have your assignments marked within 1 week. You also may face situations that will prevent timely completion of assignments. I will attempt to accommodate extensions, but out of fairness to others in the class the argument and evidence should be compelling. Acceptable reasons for late assignments might include illness for you or a direct member of your family, etc. Conflicts with other class work, sporting or entertainment events, and computer/media crashes are normally insufficient. Regardless of the argument, granting of extensions is at my discretion.

Dishonesty and Professional Conduct
Purposeful dishonesty and plagiarism is a series offence both in the classroom and the work place. Ignorance is not a valid excuse. Please consult the Calendar (2011-2012, P.59) for definitions of ***Plagiarism*** or ***Cheating*** and potential consequences. Following graduation, many of you will apply for admission to a professional association. Members of the BC College of Applied Biology (http://www.cab-bc.org/files/Code%20of%20Ethics%20colour%202008%20one%20page.pdf), BC Association of Forestry Professionals (http://www.abcfp.ca/regulating_the_profession/policies_guidelines.asp), and the Canadian Institute of Planners (http://www.cip-icu.ca/web/la/en/pa/C59DDE35F1184B5E89385E53506C19F8/template.asp) are guided by standards of professional practice and codes of ethics. Those guidelines provide a solid measure of conduct, applicable to both the professional activities and private life of the member, which I urge you to adopt for this class.

Other Details
- The schedule of topics and assignments, as currently outlined in the syllabus, are subject to change with notification.
- Persons with disabilities requiring special learning approaches should contact the instructor and Disability Services early in the semester (http://www.unbc.ca/disabilities/index.html).

Schedule of Course Topics and Labs

Date	Topic	Lec./Lab No.
Jan 4	Introduction to course and planning	Lec – 1
Jan 9	Sustainability: the foundation of natural resources planning	Lec – 2
Jan 9 *Lab*	GIS lab #1 – Learning spatial data	**Lab – 1**
Jan 11	General themes in policy and planning theory	Lec – 3
Jan 16	Formalising the planning process: Criteria & Indicators (C&I)	Lec – 4
Jan 16 *Lab*	GIS lab #2 – Joining and querying data	**Lab – 2**
Jan 18	Values and world views – their role in the planning process	Lec – 5
Jan 23	Strategic and operational planning – historical & contemporary perspective	Lec – 6
Jan 23 *Lab*	Introduction to planning project	**Lab – 3**
Jan 25	Large-scale land-use zoning	Lec – 7
Jan 30	Strategic planning and federal legislation: SARA	Lec – 8
Jan 30 *Lab*	GIS lab #3 – Spatial buffers and cartography	**Lab – 4**
Feb 1	Application of SARA – exploring the legislation in the context of caribou	Lec – 9: *Dale Seip*, MFLNRO
Feb 6	Public involvement, consultation, and conflict	Lec – 10:
Feb 6 *Lab*	GIS lab #4 – HSI and corridors	**Lab – 5**
Feb 8	Decision support tools for planning – state of the art	Lec – 11
Feb 13	Aboriginal consultation and resource management – a provincial perspective	Lec – 12: *Wayne Giles*, MFLNRO
Feb 13 *Lab*	Overview of writing goals, objectives, and strategies; work on plans	**Lab – 6**:
Feb 15	***Mid-Term Exam***	
Feb 20-24	**Mid-semester break – get some sleep!**	
Feb 27	Aboriginal consultation and resource management – an alternative perspective	Lec – 13: Norman Dale, *Consultant*
Feb 27 *Lab*	Representing aboriginal values in plans	**Lab – 7**
Feb 29	Park planning, management, and conservation area design	Lec – 14
Mar 5	Park planning – a provincial perspective	Lec – 15: *Scott Back*, MoE
Mar 5 *Lab*	Working on resource plans	**Lab – 8**
Mar 7	Planning for oil and gas exploration and development	Lec – 16
Mar 12	Timber Supply Review – measuring values and making tradeoffs to set the province's AAC	Lec – 17:*Doug Beckett*, *John Pousette*, MFLNRO
Mar 12 *Lab*	Hands-on experience conducting a timber supply review	**Lab – 9:** *Doug B.*, *John P.*, MFLNRO
Mar 14	Forest Stewardship Plans: The Forest and Range Practices Act	Lec – 18
Mar 19	Fitting wildlife and biodiversity into FRPA	Lec – 19
Mar 19 *Lab*	Working on resource plans –cont.	**Lab – 10**
Mar 22	Strategic planning for biodiversity – past and present	Lec – 20
Mar 26	Non-legislative approaches: certification	Lec – 21
Mar 26 *Lab*	Working on resource plans –cont.	**Lab – 11**
Mar 28	Environmental Assessment and cumulative effects	Lec – 22
Apr 2	*Class discussion*: criticising and improving natural resources planning	Lec – 23
Apr 2 *Lab*	Presentation of plans	
Apr 4	Course review for final exam	Lec – 24

Supplemental Readings

Date	Lec. No.	Reading
Jan 16	Lec – 4	Karjala et al 2004. Criteria and indicators for sustainable forest planning: a framework for recording Aboriginal resource and social values. Forest Policy and Economics 6:95-110.
Jan 18	Lec – 5	Sherry & Meyers 2002. Traditional environmental knowledge in practice. Society and Natural Resources 15:345-358.
Jan 23	Lec – 6	Mascarenhas & Scarce 2004. "The intention was good": Legitimacy, consensus-based decision making, and the case of forest planning in British Columbia, Canada. Society and Natural Resources 17:17-38.
Jan 25	Lec – 7	Sherry & Johnson 1999. The forgotten forest: revisiting the forestland allocation strategy. Forestry Chronicle 75:919-927.
Jan 30	Lec – 8	Sierra Legal Defence Fund. A guide to Canada's Species at Risk Act.
Feb 6	Lab – 5	Pullinger & Johnson 2010. Maintaining or restoring connectivity of modified landscapes: evaluating the least cost path model with multiple sources of ecological information. Landscape Ecology 25:1547-1560.
Feb 8	Lec – 11	Schneider et al. 2003. Managing the cumulative impacts of land uses in the Western Canadian Sedimentary Basin: A modelling approach. Conservation Ecology 7:8.
Feb 27	Lab – 7	Sherry et al. 2005. Aboriginal Forest Planning Guidebook. http://researchforest.unbc.ca/afpp/Aboriginal_Forest_Planning_Process_Final.pdf
Feb 29	Lec – 14	Craighead & Cross 2004. A conservation area design (CAD) for the inland temperate rainforests of Canada.
Mar 26	Lec – 21	Araujo et al. 2009. Why Brazilian companies are certifying their forests? Forest Policy and Economics 11:579-585.
Mar 28	Lec – 22	Johnson 2011. Regulating and planning for cumulative effects: The Canadian experience. *In* P. Kraussman & L. Harris eds. Cumulative Effects in Wildlife Management: Impact Mitigation. Taylor & Francis.