

Undergraduate Academic Board Agenda

October 24, 2008

ADM 204

2:00 – 5:00 pm

I. Roll

() Hilary Davies, Chair	() Cheryl Smith	() Deborah Mole
() Bettina Kipp Lavea	() Toni Croft	() Erik Hirschmann
() Suzanne Forster	() Robin Wahto	() Utpal Dutta
() Fred Barbee	() Kenrick Mock	() vacant (CAS)
() Catherine Sullivan	() Marion Yapuncich	() Mari Ippolito (FS At Large, CAS)
() Hilary Seitz	() Jesse Mickelson	

II. Approval of the Agenda (pg. 1-2)

III. Approval of Meeting Summary for October 10, 2008 (pg. 3-4)

IV. Administrative Report

A. Vice Provost Tom Miller

B. Registrar John Allred

V. Chair's Report

A. UAB Chair- Hilary Davies

B. GER Chair- Suzanne Forster

VI. A. Institutional Outcomes/ Assessment Ad Hoc Committee Update

VII. Program/Course Action Request – Second Reading

A. CAS

Chg PS A101 Introduction to American Government (3 cr) (3+0)

Chg PS A102 Introduction to Political Science (3 cr) (3+0)

Chg PS A311 Comparative Politics (3 cr) (3+0)

No revisions

VIII. Program/Course Action Request – First Reading

Add Bachelor of Arts in Environment & Society (pg. 5)

Add Bachelor of Science in Environment & Society (pg. 6)

Chg Minor, Environmental Studies (pg. 7)

Add Minor, Geography (pg. 8-11)

Del GEOG A205 Elements of Physical Geography (3 cr) (3+0) (pg. 12)

Del GEOG A205L Elements of Physical Geography Laboratory (3 cr) (0+3) (pg. 13)

Del ENVI A202 Earth as an Ecosystem: Introduction to Environmental Science (pg. 14)

Add ENVI A470 Environmental Planning and Problem Solving (4 cr) (2+6) (pg. 15-20)

Del ENVI A492 Proseminar in Environmental Studies (3 cr) (3+0) (pg. 21)

IX. Old Business

A. Policy Handbook Update

X. New Business

A. Plan for UAB Goals for 2008-2009.

XI. Informational Items and Adjournment

A. [Curriculum Log](#)

B. [Curriculum Handbook](#)

C. [Catalog Copy](#)

Undergraduate Academic Board Summary

October 17, 2008

ADM 204

2:00 – 5:00 pm

I. Roll

(x) Hilary Davies, Chair	() Cheryl Smith	(x) Deborah Mole
(x) Bettina Kipp Lavea	(x) Toni Croft	(e) Erik Hirschmann
(x) Suzanne Forster	(x) Robin Wahto	() Utpal Dutta
(x) Fred Barbee	(x) Kenrick Mock	() vacant (CAS)
(x) Catherine Sullivan	(x) Marion Yapuncich	(x) Mari Ippolito (FS At Large, CAS)
(x) Hilary Seitz	(x) Jesse Mickelson	

II. Approval of the Agenda (pg. 1-2)

Prerequisite enforcement= Concurrency with ENGL A111 and PRPE A108

PS courses will not be discussed. They will be back on October 24th

Approved w/ change

III. Approval of Meeting Summary for October 10, 2008 (pg. 3-5)

Approved

IV. Administrative Report

A. Vice Provost Tom Miller

Accreditation Team went to Seattle for Accreditation Conference

Continuing to meet with Steering Committee- Looking at integrating planning process with the mission expansion, institutional outcomes, and environmental scan.

According to Tom Miller, Accreditation documents will not be ready for the agenda next week. They will be on the UAB agenda for 2 meetings in November.

B. Registrar John Allred

No report

V. Chair's Report

A. UAB Chair- Hilary Davies

Discussed issues of departments affected by other program changes.

Ex. ECON made course number change. Real Estate program uses this course.

Need to work on streamlining process if appropriate.

B. GER Chair- Suzanne Forster

Approved PS A101 (minor changes), A102 (minor changes), A311 (added prerequisite)

Approved CE A438 (discussed how this would be assessed)

VI. A. Institutional Outcomes/ Assessment Ad Hoc Committee

Need a volunteer from GERC, UAB, GAB, community campus

If people are not in the right slots by next Tuesday, Hilary and Patt have permission to complete the Committee as they see fit.

VII. Program/Course Action Request – Second Reading

A. CAS

- Chg PS A101 Introduction to American Government (3 cr) (3+0) (pg. 6-9)
Chg PS A102 Introduction to Political Science (3 cr) (3+0) (pg. 10-13)
Chg PS A311 Comparative Politics (3 cr) (3+0) (pg. 14-17)

All PS courses tabled until 10/24

B. CHSW

These courses have already been approved by Faculty Senate, but are returning to have another second reading to clarify prerequisite issues.

- Chg NURS A220 Perinatal Nursing (3 cr) (3+0) (pg. 18-23)
Chg NURS A220L Perinatal Nursing Lab (1 cr) (0+3) (pg. 24-28)
Chg NURS A221 Advanced Parenteral Therapy Lab (1 cr) (0+2) (pg. 29-32)

Approved

C. CTC

- Chg FIRE A121 Fire Behavior and Combustion (3 cr) (3+0) (pg. 33-37)

Approved

D. KPC

- Add CED A157 The Art and History of Brewing (1 cr) (1+0) (pg. 38-41)

Approved

E. SOE

- Chg CE A438 Design of Civil Engineering Systems (3 cr) (3+0) (pg. 42-46)

Approved

VIII. Program/Course Action Request – First Reading

IX. Old Business

- A. Policy Handbook
Look at Handbook and decide what can be pulled out and put in the procedure section
- B. Prerequisite enforcement= Concurrency with ENGL A111 and PRPE A108
There needs to be more sections, more faculty; but UAB cannot tell departments what to do.

X. New Business

XI. Informational Items and Adjournment

- A. [Curriculum Log](#)
B. [Curriculum Handbook](#)
C. [Catalog Copy](#)



Curriculum Action Request

University of Alaska Anchorage

Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1a. School or College AS CAS		1b. Division ASSC		1c. Department Geography and Environmental Studies	
2. Course Prefix	3. Course Number	4. Previous Course Prefix & Number		5a. Credits/CEU	5b. Contact Hours (Lecture + Lab) (+)
6. Complete Course/Program Title Minor, Environmental Studies					
Abbreviated Title for Transcript (30 character)					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action <input type="checkbox"/> Course <input checked="" type="checkbox"/> Program			9. Repeat Status # of Repeats Max Credits		
<input type="checkbox"/> Add <input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input checked="" type="checkbox"/> Change <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <small>(mark appropriate boxes)</small> <input type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Delete <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Other Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other			10. Grading Basis <input type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date semester/year From: Fall/2009 To: /9999		
			12. <input type="checkbox"/> Cross Listed with _____ <input type="checkbox"/> Stacked with _____ Cross-Listed Coordination Signature		
13. List any programs or college requirements that require this course					
14. Coordinate with Affected Units: UAA Faculty Listserve, Deans and Directors Colleges & Sites Department, School, or College _____ Initiator Signature _____ Date					
15. <input type="checkbox"/> General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input type="checkbox"/> Integrative Capstone					
16. Course Description					
17a. Course Prerequisite(s) (list prefix and number)		17b. Test Score(s)		17c. Co-requisite(s) (concurrent enrollment required)	
17d. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		17e. Registration Restriction(s) (non-codable)			
18. <input type="checkbox"/> Mark if course has fees					
19. Justification for Action The development of a new major in Environment & Society has necessitated an update to the Environmental Studies minor and the lists of selective courses required for the minor.					

____ Approved
____ Disapproved: _____
Initiator (faculty only) Date

____ Approved
____ Disapproved: _____
Department Chairperson Date

____ Approved
____ Disapproved: _____
Curriculum Committee Chairperson Date

____ Approved
____ Disapproved: _____
Dean/Director of School/College Date

____ Approved
____ Disapproved: _____
Undergraduate or Graduate
Academic Board Chairperson Date

____ Approved
____ Disapproved: _____
Provost or Designee Date

Environment & Society

Environmental problems and society's responses to the challenges presented by a changing environment are some of the most pressing issues facing our modern world. The interdisciplinary degree in Environment & Society prepares students as informed citizens and for careers in environmental advocacy, policy setting and analysis, education, urban and resource planning, and graduate studies in a variety of disciplines.

The curriculum in the Environment & Society degree program will educate students about the fundamental role of interconnected, natural/living systems in supporting life and social well-being and the key threats to these systems and the challenges society faces in meeting these threats. In addition, students are exposed to the key methods and tools they will need to engage as professionals and citizens to promote the long-term health and vitality of ecological, social, economic, and cultural systems and to make informed decisions about environmental issues.

Curriculum in the Environment & Society major as well as course work offered by the Department of Geography and Environmental Studies places an emphasis on community engagement and the development of advanced skills in public science writing.

In addition to a Bachelor of Arts and a Bachelor of Science in Environment & Society, minors in Environmental Studies and in Geography are also offered.

Program Outcomes

The specific educational outcomes that support the program objectives are to produce graduates who are able to:

- Describe the fundamental role of natural/living systems in supporting life and social well-being and the key threats to these systems.
- Explain the central importance of interconnections and relationships among people and the natural world in understanding the environmental and related challenges facing society.
- Apply appropriate methods and tools to engage as professionals and citizens to promote the long-term health and vitality of ecological, social, economic, and cultural systems.
- Demonstrate the ability to think critically about the relative merits of arguments, to anticipate consequences of actions, and to make informed decisions about environmental issues.

Geography and Environmental Studies Faculty

Mark Carper
Andy Kliskey
Dorn Van Dommelen

Affiliated Faculty

Lilian Alessa
Nancy Andes
Raymond Anthony

Jackie Cason
Steve Colt
Steve Haycox

Frank von Hippel
Lee Ann Munk
David Yesner

Bachelor of Arts, Environment & Society

Bachelor of Science, Environment & Society

Admission Requirements

Complete the Admission to Baccalaureate Programs Requirements in the Catalog chapter, “Academic Standards and Regulations.”

Graduation Requirements

Students must complete the following graduation requirements:

A. General University Requirements

Complete the General University Requirements of All Baccalaureate Degrees listed at the beginning of the Undergraduate Programs chapter.

B. General Education Requirements

Complete the General Education Requirements for Baccalaureate Degrees listed at the beginning of the Undergraduate Programs chapter.

C. College of Arts and Sciences Requirements

Complete the College of Arts and Sciences Requirements for either a BA or BS degree listed at the beginning of the CAS section.

Major Requirements

1. Complete the following departmental core courses (11)

ENVI/GEOG	A211	Earth Systems: Science and Geography of the Natural Environment (3)
ENVI/GEOG	A211L	Earth Systems Lab (1)
ENVI	A212	Living on Earth (3)
ENVI	A470	Environmental Planning and Problem Solving (4)

2. Complete the following interdisciplinary core courses (22)

BIOL	A373	Conservation Biology (3)
CEL	A292	Introduction to Civic Engagement (3)
CEL	A395	Civic Engagement Internship (3)
ENGL	A478	Public Science Writing (3)
ENVI/ECON	A210	Environmental Economics and Policy (3)
ENVI/PHIL	A303	Environmental Ethics (3)
GIS	A268	Elements of GIS (4)

3. Complete 9-10 credits from one of the following emphases:

Life Science and Environment Emphasis:

BIOL	A271	Principles of Ecology (3)
BIOL	A309	Biogeography (3)
BIOL	A331	Systematic Botany (4)
BIOL	A378	Marine Biology (3)
BIOL	A475	Arctic Tundra Ecosystems (3)
BIOL	A476	Boreal Ecosystems (3)
BIOL	A485	Environmental and Ecological Applications of GIS (3)

Natural Science and Environment Emphasis:

BIOL	A485	Environmental and Ecological Applications of GIS (3)
CHEM	A450	Environmental Chemistry (3)
GEOL	A115	Environmental Geology (3)

GEOL	A340	Hydrogeology (3)
GEOL	A350	Geomorphology (4)
GEOL	A455	Permafrost and Periglacial Geomorphology (3)
GEOL	A457	Soil Genesis and Classification (3)
GEOL	A460	Environmental Geochemistry (3)

Society and Environment Emphasis:

ANTH	A354	Culture and Ecology (3)
ECON	A415	Urban and Regional Economics (3)
ECON	A435	Economics of Resources (3)
LSSS	A311	People, Places, and Ecosystems (3)
SOC	A307	Demography (3)
SOC	A309	Urban Sociology (3)
SOC	A404	Environmental Sociology (3)

Minor, Environmental Studies

Complete the following required core courses: (11)

ENVI/GEOG	A211	Earth Systems: Science and Geography of the Natural Environment (3)
ENVI/GEOG	A211L	Earth Systems Lab (1)
ENVI	A212	Living on Earth (3)
ENVI	A470	Environmental Planning and Problem Solving (4)

Complete three of the following courses with at least one from each list: (9)

List A

BIOL	A271	Principles of Ecology (3)
BIOL	A373	Conservation Biology (3)
BIOL	A485	Environmental and Ecological Applications of GIS (3)
CHEM	A450	Environmental Chemistry (3)
GEOL	A115	Environmental Geology (3)
GIS	A268	Elements of GIS (4)
GIS	A370	GIS and Remote Sensing for Natural Resources (3)

List B

ANTH	A354	Culture and Ecology (3)
CEL	A292	Introduction to Civic Engagement (3)
CEL	A395	Civic Engagement Internship (3)
ENGL	A478	Public Science Writing (3)
ENVI/ECON	A210	Environmental Economics and Policy (3)
ENVI/PHIL	A303	Environmental Ethics (3)
LSSS	A311	People, Places, and Ecosystems (3)
SOC	A404	Environmental Sociology (3)

Minor, Geography

Complete the following required core courses: (11)

GEOG/INTL	A101	Local Places/Global Regions: An Introduction to Geography (3)
ENVI/GEOG	A211	Earth Systems: Science and Geography of the Natural Environment (3)
ENVI/GEOG	A211L	Earth Systems Lab (1)
GIS	A268	Elements of GIS (4)

Complete one of the following options: (9)

- 9 credits of upper-division GEOG
- LSSS A311 and 6 credits of upper-division GEOG

ENVI A470

Course Content Guide

Date: 3 April 2008

I. Course Information

- a. College: Arts and Sciences
- b. Course Subject: ENVI
- c. Course Number: A470
- d. Credits/Contact: 4 credits, 2 + 6 contact, GER Integrative Capstone course
- e. Title: Environmental Planning and Problem Solving
- f. Grading Basis: A-F
- g. Prerequisites: ENGL A212 or ENGL A213, COMM A241, STAT A252 or STAT A253, ENVI/GEOG A211 and ENVI/GEOG A211L, ENVI A212
- h. Course Fees: No
- i. Description: Examination of methodological concepts and issues in environmental planning and problem-solving. Includes the content and structure of Environmental Impact Assessment (EIA); approaches to EIA with reference to the assessment of impacts on biophysical and social systems. Involves substantial practical work, including hands-on exercises, writing, and oral presentations.

II. Instructional Goals and Student Outcomes

A. Instructional Goals. Instructors will:

1. Provide assignments, opportunities for hands-on experience, and lead discussions through which students can consider systematic approaches toward real-world environmental problem solving.
2. Lead discussions or facilitate invited speakers through which students gain an understanding of issues and perspectives faced by environmental professionals engaged in environmental problem solving.
3. Provide discussions and assignments through which students gain an understanding of methodological approaches, frameworks, and techniques used for environmental impact assessment.
4. Enable development of effective communication skills for environmental planning and problem-solving.

B. Student Outcomes. Students will be able to:

Outcome	Assessment Methods
Integrate knowledge from diverse fields and disciplines in the context of environmental problem-solving and impact assessment. [Knowledge Integration]	Group EIA exercise and report.

Apply appropriate methods, tools, and data to engage as professionals in the environmental problem-solving and planning context.[Information Literacy]	Group EIA exercise, assignment, and professional presentation.
Critically evaluate the relative merits of arguments, anticipate consequences of actions, and make informed decisions about environmental issues. [Critical Thinking]	Discussions and presentations in studio practicum, and a critical thinking exam on approaches, frameworks, and techniques for EIA
Effectively communicate knowledge in a professional context (in the environmental field). [Effective Communication]	Individual and group EIA exercise, written report, and professional presentations.

III. Guidelines for Evaluation

Evaluation procedures are at the discretion of the faculty member teaching the course; however, evaluation will include, but not be limited to, case studies, group work, service learning projects, field visits, class reports, Blackboard discussion groups, and written work. Course objectives and student outcomes will be assessed as outlined in the Table above.

The instructor will administer a series of questions designed to measure educational effectiveness in the Geography and Environmental Studies Major during the course. Results of these questions will be reported to the chair of the department.

IV. Course Level Justification

This is an upper division integrative GER capstone course that requires substantial prerequisite knowledge of environmental processes, life science, and quantitative reasoning skills. The course satisfies all of the criteria for a capstone course. This course includes knowledge integration of GER Basic College-Level skills (Tier 1) and Disciplinary Areas (Tier 2) as part of its design. It focuses on practice, study, and critical evaluation. Students completing this Integrative Capstone requirement will demonstrate the ability to integrate knowledge by accessing, judging and comparing knowledge gained from diverse fields and by critically evaluating their own views in relation to those fields.

In particular, and reflecting the requirements for an Integrative Capstone course as per the Curriculum Handbook, this course will emphasize the following. Students will be able to:

- a. Investigate the complexity of approaches and decisions regarding environmental planning and impact assessment..
- b. Locate and use relevant information to make support professional decisions with respect to environmental planning and impact assessment.
- c. Adopt critical perspectives for understanding and balancing diverse data and perspectives reading environmental planning decisions.
- d. Integrate knowledge and employ skills gained to synthesize creative thinking, critical judgment, and personal experience in a meaningful and coherent manner.

V. Course Outline

1. Nature and importance of methodology
2. Problem-solving strategies

- a. Scientific method – inductive and hypothetico-deductive
 - b. Phenomenology
3. Systems thinking and characterization
 - a. Hard systems methodologies
 - b. Soft systems methodologies
4. Complex systems and complex problems I
 - a. Complexity
 - b. Chaos
5. Complex systems and complex problems II
 - a. The precautionary principle
 - b. Hedging and flexing
6. Theories of planning I
 - a. Comprehensive planning
 - b. Incremental planning
7. Theories of planning II
 - a. Mixed scanning
 - b. Transactive planning
8. Environmental impact assessment (EIA)
 - a. Origins
 - b. Form
 - c. The National Environmental Policy Act
 - d. Council on Environmental Quality
9. EIA methodology, methods, and techniques I
 - a. General requirements and models
 - b. Impact identification methods
10. EIA methodology, methods, and techniques II
 - a. Evaluation methods
 - b. Environmental documents and review process
 - c. Reviewing and preparing EAs and EISs
11. EIA methodology, methods, and techniques III
 - a. Scoping and public participation
 - b. Mitigation
 - c. Monitoring and analysis
12. Adaptive environmental assessment and management
13. EIA and environmental justice
14. Dispute resolution
15. International comparisons

Studio practicum

1. Problem characterization exercise
2. Set complex system analysis problem
3. Oral presentations on complex systems problem
4. Set EIA review exercise
5. Discussion of EIA review exercise
6. Oral presentations on EIA review
7. Select EIA project framework and familiarization,
8. Baseline studies
9. Field/site visit
10. Select assessment framework, identify information needs

11. Team progress report: plan detailed studies
12. Team progress report: trouble shooting
13. Written and oral team outlines
14. EIA report final preparation
15. Final EIA oral presentations

VI. Suggested Texts

No single text will be used but the following are recommended core references:

- Glasson, J., Therivel, R., and Chadwick, A. 2005. Introduction to environmental impact assessment. Routledge, London.
- Morgan, R. K. 1999. Environmental impact assessment: a methodological approach. Springer. (UAA).
- Sadler, B., Aschemann, R., Dusik, J., Fischer, T, Partidario, M., and Verheem, R. (eds.). 2008. Handbook of strategic environmental assessment. Earthscan.

VII. Bibliography

Below is a sample of possible resources:

- Barrow, C.J. 2000. Social impact assessment: an introduction. Arnold. (UAA)
- Beanlands, G. E. and Duinker, P. N. 1984. An ecological framework for environmental impact assessment. *Journal of Environmental Management* 18: 267-277.
- Caratti, P., Dalkmann, H., Jiliberto, R. 2004. Analysing strategic environmental assessment: towards better decision-making. Edward Elgar. (UAA).
- Canter, L.W. 1996. Environmental impact assessment. McGraw-Hill.
- Chapman, K. 1981. Issues in EIA progress. *Human Geography* 5: 191-210.
- Dalal-Clayton, B. and Sadler, B. 2008. Sustainability appraisal: a sourcebook and reference guide to international experience. Earthscan.
- Duinker, P.N. and Beanlands, G.E. 1986. The significance of environmental impacts: an exploration of the concept. *Environmental Management* 10: 1-10.
- Fischer, T. 2007. Theory and practice of strategic environmental assessment. Earthscan.
- Gibson, R., Hassan, S., Holtz, S., Tansey, J., and Whitelaw, G. 2005. Sustainability assessment: criteria and processes. Earthscan.
- Gilpin, A. 1995. Environmental impact assessment: cutting edge for the twenty-first century. Cambridge University Press. (UAA).
- Holling, C.S (ed.). 1978. Adaptive Environmental Assessment and Management. (UAA).
- Industry and Environment. 1995. Special issue on environmental management tools. 18: 2&3.
- Jones, C. (ed.). 2005. Strategic environmental assessment and land use planning: an international evaluation. Earthscan. (UAA).
- International Association for Impact Assessment. 1999. Principles of Environmental Impact Assessment Best Practice. URL: http://www.iaia.org/modx/assests/files/Principles%20of%20IA_web.pdf.
- Lawrence, D.P. 2003. Environmental impact assessment: practical solutions to recurrent problems. Wiley-Interscience. (UAA).
- Lincoln, S. 2006. Challenged Earth: an overview of humanity's stewardship of earth. Imperial College Press.
- Madu, C. 2007. Environmental planning and management. World Scientific.
- Marriot, B. B. 1997. Environmental impact assessment: a practical guide. McGraw-Hill Professional.
- Morgan, R. K. 1999. Environmental impact assessment: a methodological approach. Springer.
- Petts, J. (ed.). 1999. Handbook of environmental impact assessment, Volume 1: Environmental Impact Assessment in Theory. Blackwell Science Ltd.
- Petts, J. (ed.). 1999. Handbook of environmental impact assessment, Volume 2: Environmental Impact Assessment in Practice: Impact and Limitations. Blackwell Science Ltd.
- Porter, A. and Fittipaldi, J. (eds) 1998. Environmental Methods Review: Retooling Impact Assessment for the New Century. The Press Club.
- Ramachandra, T.V. (ed.). 2006. Cumulative environmental impact assessment. Nova Science Publishers. (UAA).
- Shephard, R.B. 2005. Quantifying environmental impact assessments using fuzzy logic. Springer. (UAA).
- Shirley, A.M.C., Strong, K.W., Hickey, E. and Sander, F. 1985. An evolving framework for environmental impact analysis I + II. Methods. *Journal of Environmental Management* 21: 343-358, 359-374.
- Speth, J. and Haas, P. 2006. Global environmental governance. Island Press.

