

# JSGS 870-Water Policy in an Age of Uncertainty

UNIVERSITY OF SASKATCHEWAN CAMPUS	
<b>INSTRUCTOR:</b>	Jeremy Rayner
<b>E-MAIL:</b>	<a href="mailto:jeremy.rayner@usask.ca">jeremy.rayner@usask.ca</a>
<b>OFFICE HOURS:</b>	E mail for availability
<b>TERM:</b>	2019-2020 Term 2

## CALENDAR DESCRIPTION

This course outlines the existential threat to global water systems, set within the context of rapid population and economic growth, unsustainable water use, climate change, and ineffective management and policy. It explores the challenge of how to manage complex water systems in an era of deep uncertainty.

## LEARNING OBJECTIVES

This course will provide students with an understanding of water policy and governance, and what this might mean for future leaders in the public sector, private sector, and civil society. Following successful completion of this course, students should be able to:

- Comprehend water law, policy and governance issues including the human right to water, water rights, indigenous water rights
- Understand dimensions of global and local water shortages and floods
- Identify hidden vulnerabilities in water systems – virtual water and climate change
- Develop water policy, strategy and stakeholder engagement in the water sector for credibility, legitimacy and salience
- Develop principles for sustainable water governance

## COURSE CONTENT AND APPROACH

This is a draft syllabus that will be finalized the first day of class when we will identify and assign the various case study presentations. The course will be conducted as a combination of a lecture and seminar class with some time set aside for work on presentations and the policy brief. Your participation is essential. All reading materials set out in the schedule below are assigned readings and will be covered in the order in which they appear.

The approach of this course is to provide students with a framework through which to understand modern-day water governance systems and arrangements, and to evaluate the effectiveness of these arrangements with attention paid to how they may help or hinder the achievement of desirable public policy outcomes. The course surveys a variety of water policy and governance arrangements focusing on the challenges and opportunities presented by each one. Attention is paid to applying conceptual frameworks to real cases of water policy successes and failures.

## COURSE OUTLINE AND ASSIGNMENTS

### Session 1 – Introduction to water governance and water policy

Water governance sets the context for water policy. Governance is a term describing how people are organized and how the authority to take and implement decisions is distributed among them. It has become an accepted part of the lexicon in policy, administrative and business circles. How is the water governance system conceptualized? What do we mean by governance arrangements and governance architectures? What are the dominant institutions and organizations? What are some of the key trends and issues?

#### REQUIRED READINGS:

Van Kersbergen, K. van Waarden, F. 2004. 'Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. *European Journal of Political Research* 43(2):143 – 171.

Head, B. 2010. *Wicked Problems in Water Governance: Paradigm Changes to Promote Water Sustainability and Address Planning Uncertainty*. Urban Water Security Research Alliance Technical Report No. 38.

[www.schoolofpublicpolicy.sk.ca](http://www.schoolofpublicpolicy.sk.ca)

## **Session 2 – What Makes Water a Policy Problem? Policy and Policy Instruments**

What makes something in the world a “problem” that requires the attention of policy makers? How does the process of policy development (ideally) unfold? What kinds of policy instruments are commonly found in the policy toolbox and what are their relative merits in addressing water policy issues?

### ***Case Study #1 (by Instructor)***

#### **REQUIRED READINGS:**

Manitoba, Office of the Auditor General. 2011. A Guide to Policy Development.

<https://www.oag.mb.ca/wp-content/uploads/2011/06/PolicyDevelopmentGuide.pdf>

Campbell, H., et al. Prices, Devices, People, or Rules: The Relative Effectiveness of Policy Instruments in Water Conservation. *Review of Policy Research* 21(5): 637-662.

## **Session 3 –Varieties of Governance: Multi-level governance, Adaptive governance, Anticipatory governance**

What theories and frameworks inform contemporary thinking about environmental governance? What approaches should we take in developing governance strategies that respond to the specific challenges of water governance?

### ***Case Study #2***

#### **REQUIRED READINGS:**

Quay, R. 2010. Anticipatory governance: A tool for climate change adaptation. *Journal of the American Planning Association*. 76(4): 496-511.

Hurlbert, M. 2009. Comparative Water Governance in the Four Western Provinces. *Prairie Forum*, a special edition on climate change. 34 (1): 45-77.

Huitema, D. et al. 2009. Adaptive Water Governance: Assessing the Institutional Prescriptions of Adaptive (Co-)Management from a Governance Perspective and Defining a Research Agenda. *Ecology and Society* 14(1): 26.

## **Session 4 – Science and Policy**

As is the case with many other policy fields involving the management of natural systems, we have recently witnessed a strong emphasis on ensuring that water policy is “evidence based”, where “evidence” means peer-reviewed science. Concerns about climate change impacts on water have only reinforced this emphasis. Under what circumstances is “evidence-based” policy possible or even desirable?

### **Case Study #3**

#### REQUIRED READINGS:

Head, B. 2010. Water policy—Evidence, learning and the governance of uncertainty. *Policy and Society* 29 171–180

Feidman, D.L. Ingram H.M. 2009. Making science useful to decision makers: Climate forecasts, water management, and knowledge networks. *Weather, Climate and Society*.

<https://journals.ametsoc.org/doi/pdf/10.1175/2009WCAS1007.1>

### **Session 5 – Framing or When is a Problem Not a Problem (or Somebody Else’s Problem)? Complexity, “Wickedness”, Security, the Nexus, Virtual Water and More**

As we saw in session #2, how something is “framed” as a problem that needs attention will have a significant impact on who is charged with the responsibility of addressing it and what tools they are likely to use to do so. Here we look at some common framings in the water policy literature and their likely consequences for policy development.

### **Case Study #4**

#### REQUIRED READINGS:

Cook, C. Bakker, K. 2012. Water Security – Debating an Emerging Paradigm. *Global Environmental Change* 22(1): 94-102.

Cairns, R. Krzywoszynska, A. 2016. Anatomy of a buzzword: the emergence of ‘the water-energy-food nexus’ in UK natural resource debates. *Environmental Science and Policy* 64: 164-170.

### **Session 6 – Evaluating Policy (1): Efficiency**

In the next three classes, we’ll look at the most common criteria that are used to assess the relative merits of different policy options and the typical policy instruments that are associated with a partiality for one kind of criterion over another. We start with efficiency and the role of economic instruments in water policy.

### **Case Study #5**

#### REQUIRED READINGS:

Mickwitz, P. 2003. A Framework for Evaluating Environmental Policy Instruments: Context and Key Concepts. *Evaluation* 9(4): 415–436/

Sjödin, J., Zaeske, A., Joyce, J. 2016, Pricing instruments for sustainable water management. Working paper Nr. 28. SIWI, Stockholm

### **Session 7: Evaluating Policy (2): Justice**

Next, we consider the criterion of justice in the broader sense of the distributive fairness of policy outcomes. This sense of a “just policy” is often overlooked because it is more difficult to operationalize than efficiency or legality but it is increasingly important in a whole range of resource policy fields, including water.

#### **Case Study #6**

##### REQUIRED READINGS:

Chan, N. 2012. Urban Water Pricing: Equity and Affordability.

<http://www.globalwaterforum.org/wp-content/uploads/2012/04/Urban-water-pricing-Equity-and-affordability-GWF-1209.pdf>

Bakker, K. 2007. The ‘Commons’ versus the ‘commodity’: Alter-globalization, antiprivatization and the human right to water in the global south. *Antipode* 39(3) 430-449.

### **Session 8: Evaluating Policy (3): Legality**

Laws are an important part of any water policy framework in most jurisdictions. Changing laws is usually difficult and requires the expenditure of political capital to overcome the opposition of those who benefit from the current arrangements. Constitutional change is especially difficult. A key question that most policy makers will ask when they receive a policy recommendation is “will it require a change in the law?” We explore these ideas in the context of the continuing scandal of access to water for Canada’s indigenous peoples.

#### **Case Study #7**

##### REQUIRED READINGS:

Boyd, D. 2011. No Taps, No Toilets: First Nations and the Constitutional Right to Water in Canada. *McGill Law Journal* 57

White et al. 2012. Water and Indigenous Peoples: Canada’s Paradox. *The International Indigenous Policy Journal*. 3(3)

### **Session 9 – Governance Intersections: Harmonization or Fragmentation, Top Down or Bottom Up?**

#### **Case Study #8**

Two key fault lines should have emerged in our discussions of different water governance arrangements. The first is between those who think that successful water policy requires strong

central direction, including, e.g. national water quality standards, and those who prefer a more experimental approach. The second, which, confusingly, partially overlaps with the first, is between those who think that water policy and governance needs to be expert-driven and those who think it should be participatory and community-based. We'll try to adjudicate and/or see if synthesis is possible.

**REQUIRED READINGS:**

Bakker, K. Cook, C. 2011. Water Governance in Canada: Innovation and Fragmentation, *International Journal of Water Resources Development*, 27(2): 275-289.

Pahl-Wostl, C. 2002. Towards sustainability in the water sector: The importance of human actors and processes of social learning. *Aquatic Sciences* 64 (4): 394–411.

**Session 10 –Case Study Mashup and Final Thoughts**

The effect of environmental and resource policy courses on students is often a sense of deep despair and hopelessness at the state of the world and at our seeming inability to change things for the better. In this final class, everyone will revisit their case study presentations and identify the challenges and opportunities for better policy and governance.

**DESCRIPTION OF ASSIGNMENTS AND EVALUATION:**

**Participation: 15%**

All students are expected to participate in seminar discussions, share their ideas, and engage in conversations with the goal of clarifying or advancing the course content

**Policy Brief: 35%**

You will pick a contemporary water policy issue in any jurisdiction with which you are familiar and write a two-page policy brief using the Government of Saskatchewan template that will be presented and discussed in the first class. This assignment is due by midnight on March 10<sup>th</sup> by [email: jeremy.rayner@usask.ca](mailto:jeremy.rayner@usask.ca)

**Session Reviews: 20%**

This assignment consists of six “session reviews” of classes 2-4 and 6-9. These short review assignments involve answering questions about the readings and class discussion in order to demonstrate competency and understanding and are worth 2-4% each. The question will be available on Blackboard shortly after the class ends and answers should be returned by email any time before midnight the same day. You do not have to complete the session review questions that

are due on the same day when you have a case study presentation due (so each student will answer six rather than seven sets of questions).

### **Case Study Presentation: 30%**

Case studies are an important part of the water policy literature and, for many of these famous cases (e.g., Flint, Cape Town, Southern California, the Murray-Darling basin), the essential features will be familiar to you from other classes in your program. Your task here is to take the governance and policy concepts learned in the previous day's class and show how they help us understand features of the governance and policy challenges in these cases. Marks will be allocated based on how well you are able to identify the key issues, your ability to link these issues with the theory and material discussed in the previous class(es), and how you defend your analysis and recommendations. You should use a slide deck as part of your presentation, which should be submitted as part of the assignment. Students will complete this assignment in pairs and case studies will be identified and allocated in the first class.

## **JSGS GRADE DESCRIPTORS**

**85+ excellent:** A superior performance with consistent strong evidence of

- a comprehensive, incisive grasp of the subject matter;
- an ability to make insightful critical evaluation of the material given;
- an exceptional capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently;
- an excellent ability to apply theories to real-world problems and intersect with related disciplines.

**80-85 Very Good:** An excellent performance with strong evidence of

- a comprehensive grasp of the subject matter;
- an ability to make sound critical evaluation of the material given;
- a very good capacity for original, creative and/or logical thinking;
- an excellent ability to organize, to analyze, to synthesize, to integrate ideas, and to express thoughts fluently;
- a strong ability to apply theories to real-world problems and intersect with related disciplines.

**75-80 Good:** A good performance with evidence of

- a substantial knowledge of the subject matter;
- a good understanding of the relevant issues and a good familiarity with the relevant literature and techniques;
- some capacity for original, creative and/or logical thinking;
- a good ability to organize, to analyze and to examine the subject material in a critical and constructive manner.

- Some ability to apply theories to real-world problems and intersect with related disciplines.

**70-75 Satisfactory:** A generally satisfactory and intellectually adequate performance with evidence of

- an acceptable basic grasp of the subject material;
- a fair understanding of the relevant issues;
- a general familiarity with the relevant literature and techniques;
- an ability to develop solutions to moderately difficult problems related to the subject material;
- a moderate ability to examine the material in a critical and analytical manner.

### **0-49 Unacceptable Performance**

## **LATE ASSIGNMENTS**

Late assignments will not be accepted without prior arrangement.

## **STUDENTS WITH SPECIAL NEEDS**

U OF S: Students in this course who, because of a disability, may have a need for accommodations are encouraged to discuss this need with the instructor and to contact Disability Services for Students (DSS) at 966-7273.

## **Students Experiencing Stress**

University of Saskatchewan (U of S): Students in this course who are experiencing stress can seek assistance from the University of Saskatchewan Student Wellness Centre. For more information, please visit this website: <https://students.usask.ca/health/centres/counselling-services.php>, or call (306) 966-4920 between 8:30 a.m. to 4:30 p.m. Monday to Friday.

## **ACADEMIC INTEGRITY AND CONDUCT**

U OF S: Understanding and following the principles of academic integrity and conduct as laid out in the University of Saskatchewan's Guidelines for Academic Conduct is vital to your success in graduate school (available at [www.usask.ca/university\\_secretary/council/reports\\_forms/reports/guide\\_conduct.php](http://www.usask.ca/university_secretary/council/reports_forms/reports/guide_conduct.php)). Ensuring that your work is your own and reflects both your own ideas and those of others incorporated in your work is important: ensuring that you acknowledge the ideas, words, and phrases of others that you use is a vital part of the scholarly endeavour. If you have any questions at all about academic integrity in general or about specific issues, contact any faculty member and we can discuss your questions.