

Advanced Water Policy Course Syllabus

NRSM 427 – Spring 2019

3 credits, CRN# 74846

Tues/Thurs 12:30-1:50pm

Forestry (FOR) Room 206

Instructor Info:

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Office Hours: Tuesday 2:30-4:00pm; or by appointment

General Course Information

Course Description

Water is a unique natural resource. For example, *water is essential*: without water, most life on Earth could not exist. *Water is ubiquitous*: water can exist as a solid, liquid, or gas and it permeates every environment on Earth. *Water is difficult to manage*: the movement of water shows little regard for human designed political boundaries and often defies human desires even in the most highly-engineered environments (e.g., dams, canals). The ways in which human institutions (laws, policies, social norms) and governments have evolved to manage water can be as unique as the nature of water itself. This is especially apparent in the United States. Water is distributed unevenly across the U.S., as is the demand for that water for industry, agriculture, and municipal use. Myriad land ownership patterns, changing demographics, and the continuing evolution of U.S. livelihoods has influenced a body of policy that attempts to deal with the multiple values of water: economic, ecological, cultural, physical, aesthetic, and even spiritual.

The study of water policy in the U.S. is roughly the study of water law, although it is an inquiry that at times calls on the study of history, anthropology, geography, and philosophy, among other disciplines. In this course we will explore the laws, policies, and judicial decisions that have and continue to shape patterns of water allocation and access in the U.S. The course will offer a brief and general introduction to U.S. water law, specifically highlighting regional and interstate differences in both surface and groundwater appropriation schemes. We will also treat important intersections between water policy and other major bodies of U.S. law and policy including the U.S.-tribal trust responsibility, the Endangered Species Act, and federal hydropower relicensing. In addition, we will pay special attention to unique aspects of Montana

water law and policy as well as current issues of local and regional importance, e.g. the Confederated Salish & Kootenai Tribes (CSKT) water compact and complicated instream flow issues for aquatic species habitat.

This is a reading intensive course with a significant class discussion component. Students will be asked to read and analyze a variety of texts including statutes, court cases, peer-reviewed and law review articles, and popular media. This course is designed for students working towards a degree in any and all environmental fields including but not limited to natural resource conservation, wildlife biology, ecology, forestry, biology, hydrology, geology, soils, and environmental studies—as well as environmental sociology, parks, tourism & recreation management, geography, philosophy, history, environmental journalism—and those who just want a better understanding of water policy and management in the U.S. and beyond!

Expected Learning Outcomes

- Students will recognize and explore basic sources of authority underpinning water laws and policies including the administration and management of water volumes and water quality (i.e., constitutional, statutory, administrative, and common law authorities).
- Students will identify the properties that make water a unique resource to govern/manage and then connect these to the ways in which the highly-developed legal system of the U.S. has adopted laws and policies to control water through use and conservation paradigms.
- Students will articulate various approaches and strategies to water distribution and water quality control including broad legal doctrines (e.g. riparian rights, prior appropriation) and specific policy instruments (e.g. regulation, market mechanisms).
- Students will evaluate and critique the assumptions, strengths, and weaknesses of various existing water policies and current water management strategies as well as potential reform measures and political obstacles to enacting reform measures.
- Students will imagine future water policy innovations given potential changes in the distribution and timing of precipitation and snowmelt and the changing demands for water resources both nationally and globally.
- Together, the instructor and students will challenge deeply held assumptions about the role of water in the U.S. and beyond, by exploring water both as a regulated natural resource, but also as a fundamental human right that is integral to each of our lives.
- Students will analyze and articulate the nature of conflicts (and potential conflicts) over water in the U.S. and globally including historical and institutional roots of conflict (e.g., American federalism, tensions between branches of government, political-economic power, geography, differences in values, etc.).

- Students will engage in discovering the myriad of human connections to water including emotional, spiritual, cultural, biophysical, and social connections; students will articulate values of water beyond its commodity worth as a regulated natural resource.
- Students will analyze various media reports on current or pending water laws and policies, and: (1) critique the accuracy of reporting in terms of the information conveyed on the potential impacts or application of a specific water law or policy; and (2) identify and synthesize reliable sources of information available to further support, critique, or clarify the media report.

Required Text

- 1) Craig, R.K., R.W. Adler, N.D. Hall. 2017. *Water Law*. Concepts and Insights Series. St. Paul, MN: Foundation Press/West Academic.
- 2) Various weekly readings posted to Moodle (*see course schedule document*)

Student & Instructor Expectations

Participation

The complexity of water policy can be energizing—and our class discussions will often reflect that. We cover a lot of ground in class and in order to facilitate this, I ask that students read the assigned readings prior to class and *be prepared to discuss the readings* in class. The text and concepts may be new and challenging; at the very least, I ask that you bring your questions from the readings and willingly share them with the class. I seek input from all students and I will likely ask students questions to solicit input and to assess comprehension of difficult topics. I reserve the right to initiate daily or weekly reading quizzes if I find that students are generally unprepared for class. Any student who misses class will be held responsible for all materials covered and all announcements made during their absence. If your absence was University-approved, you are eligible to make up any missed in-class work collected for points. Life happens, and I recognize that. I am generally flexible with regard to unforeseen absences and make-up work as long as you are transparent and diligent in communicating with me.

The UM “Class Attendance/Absence Policy” can be found in the [UM Catalog Academic Policies and Procedures](https://montana-catalog.coursedog.com/academics/policies-procedures) (<https://montana-catalog.coursedog.com/academics/policies-procedures>).

Respect, Inclusiveness and Diversity of Thoughts, Ideas and People

In teaching courses, I believe and act upon the idea that all students are entitled to and deserve respect, courtesy and tolerance, regardless of their race, background, religious affiliation, gender, sexual preference, disability or any other perceived difference. Likewise, faculty, staff and fellow students deserve the same treatment from other students. Therefore, within the bounds of my courses and professional responsibilities as a university instructor, I make every

effort to promote and create a safe space for diverse thoughts, regardless of the form of communication. I ask that you do the same.

Academic Honesty

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the [Student Conduct Code](http://www.umt.edu/student-affairs/community-standards/default.php) (<http://www.umt.edu/student-affairs/community-standards/default.php>).

Plagiarism

I will not tolerate plagiarism in any form. Students need to be familiar with plagiarism and how to properly cite references and attribute the ideas of others to original sources in their work. The following is taken directly from the [UM Catalog Academic Policies and Procedures](https://montana-catalog.coursedog.com/academics/policies-procedures) (<https://montana-catalog.coursedog.com/academics/policies-procedures>):

“Plagiarism is the representing of another's work as one's own. It is a particularly intolerable offense in the academic community and is strictly forbidden. Students who plagiarize may fail the course and may be remanded to Academic Court for possible suspension or expulsion.

Students must always be very careful to acknowledge any kind of borrowing that is included in their work. This means not only borrowed wording but also ideas. Acknowledgment of whatever is not one's own original work is the proper and honest use of sources. Failure to acknowledge whatever is not one's own original work is plagiarism.”

Equal Access

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors and [Disability Services for Students](http://www.umt.edu/dss/) (<http://www.umt.edu/dss/>) (DSS). If you think you may have a disability adversely affecting your academic performance, and you have not already registered with DSS, please contact DSS in Lommasson Room #154 or at 406.243.2243. I will work with you and DSS to provide an appropriate modification.

Basic Needs Security Statement

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the [Office for Student Success](http://www.umt.edu/oss/) (<http://www.umt.edu/oss/>) for support. Furthermore, please notify me if you are comfortable in doing so. This will enable me to provide any resources that I may possess.

Assignments & Assessment

Assessment of student learning is important, but only one part of the course. As this course is not yet required for any undergraduate program of study (but can fulfill a policy requirement for some majors, e.g. WBIO, ECOR, RSCN), each of you have some motivation to learn about water policy. To accommodate this, I have structured the course to provide significant flexibility in topics covered and will employ multiple forms of assessment to evaluate student learning. Throughout the semester, I will also provide students with the opportunity to evaluate the class structure, content, assessment strategies, and my performance in order to improve your learning experience *during* the progression of the course.

Midterm & Final Exams

There will be two exams in this course consisting of short answer essay questions. One exam will be given roughly mid-semester (tentatively Oct 10th) and the other during our final exam period: **Wednesday, December 11th from 3:20-5:20pm**. Make-up exams will only be scheduled for University-excused absences on the day of exam and they will be re-scheduled at my convenience, prior to the in-class exam if possible. Please contact me ASAP if you know you will have a conflict with an exam in this class.

In-class Assignments

Each week I will facilitate in-class activities for you to become more familiar with the concepts surrounding water policy. Participation in these in-class assignments is mandatory and I will grade these based on observed level of participation and produced content. The number and type of activities will vary and explicit instructions will be provided in each class. In addition to this, I will occasionally give quizzes at the beginning of class to measure your progress with and comprehension of the readings. Missed quizzes and writing assignments can be made up for a University-excused absence. Cumulatively, these quizzes and in-class activities will make up roughly 25 points of your final grade (half of your participation grade). I allow students to miss up to two (2) in-class quizzes or writing assignments without penalty. I do not give extra credit in this course, but I will note your level of participation in class and your diligence in keeping up with the readings as judged by your performance on in-class quizzes and writing assignments. For example, a final grade of 89.4% is a B+ unless a student has not missed a quiz and has provided thoughtful, accurate answers on in-class writing assignments—in this case I may consider this grade an A-.

Water Policy News/Current Events Assignment

There is a lot happening in the world of water policy—every day. This assignment is designed to help us foster an ongoing discussion about current issues of water policy in the U.S. For this assignment, students will come prepared to give a 5-minute presentation on a current issue of water policy that they discovered either in a popular news article or by tracking legislation or administrative procedures (e.g., through federal agency websites or via [GovTrack](https://www.govtrack.us/) (<https://www.govtrack.us/>)). The 5-minute presentation should cover the nuts and bolts of the water policy issue or controversy, including who is involved, what policies are implicated or

debated, where and what aspects of water governance the issue impacts, how the policy will be decided (or has been decided), and the future of this issue. Students will also evaluate the quality and reliability of information (sources) found on their selected water policy current event. Specific assignment instructions and an evaluation rubric will be presented to students in class and on Moodle. News or current events presented by students should be relatively recent (i.e., within the last 6 months).

Water Policy Engagement Assignments

These assignments (2) will consist of either writing prompts or a series of questions designed to provide you opportunity for deeper engagement with specific challenges in U.S. and MT water policy. Details will be provide two weeks before each assignment is due. Students will submit these assignments via Moodle unless otherwise noted in class and in assignment instructions.

Water Service Learning Assignment

During the semester, I ask you to give 3 hours of “service” back to the community in the form of a physical activity related to water. There will be two options associated with this assignment, i.e., two different ways in which you can complete the assignment—tentatively referred to as “Track A” and “Track B.” Track A will be the preferred option, the one in which I highly encourage you to participate. Track A will involve a field trip to a nearby watershed to investigate local water policy-related issues; in the past we have traveled Confederated Salish and Kootenai Tribes (CSKT) reservation in Pablo, MT to learn about this CSKT Water Compact. On this field trip, we will merge our studies of water policies with local realities on the landscape. During the field trip, we will engage in a 3-hour service project which will count as the service hours for all students who attend the field trip. Track B is the option for students who have a conflict on the day of our field trip—this option is only to be used if a student cannot attend the field trip. Details on this option will be provided in class, and each student who elects this option must meet with Prof. Chaffin to discuss by September 19th.

As part of this assignment, I will ask you to submit a writing assignment consisting of a **2-page, single spaced, typed** response to a writing prompt that I will provide to you at least two weeks before the paper is due. I expect you to respond to the writing prompt or question based on a combination of your assessment of the readings, personal experience, and additional research or reading as necessary. In some cases, I will ask you for your opinion, but I will require you to support your opinion with evidence from the text or other sources. When you cite a resource (e.g., our text, newspaper, magazine, peer-reviewed or law review articles), please list the reference at the end of your reflection essay following APA citation guidelines. A great tutorial for how to format citations in APA style can be found on the [Purdue University Online Writing Lab website](https://owl.english.purdue.edu/owl/resource/560/1/) (<https://owl.english.purdue.edu/owl/resource/560/1/>). Some important details about writing for this course:

1. Papers are to be submitted via Moodle (late work will not be accepted without written notification of a University-excused absence) by the assigned due date and time.

2. No more than 2-pages of single-spaced text, 12-point font will be accepted.
3. Put your Name, 790# and assignment number at the top of the page.

Water Policy Briefing Paper

This is an “advanced” water policy course and thus I want you to be familiar with the process of critically analyzing water policy. As part of your assessment in this course, I will ask you (alone or in groups) to explain a specific water policy challenge, assess the situation and current context of law, policy, or legal action surrounding the challenge, and clearly communicate the water policy challenge in writing—including potential solutions or paths forward. I encourage you to choose a water policy challenge as closely related to your personal or professional interests as possible. To facilitate this, I will provide potential examples in class and provide you with time in class to work in groups or meet with me to discuss possibilities. This assignment can be tied to your current event presentation, so please consider that when choosing a current event to research and discuss. A final written briefing paper for this assignment will be due at the end of the semester. To help you produce quality work, I will provide multiple opportunities for you to turn in drafts of this work in stages as part of the assignment progression. I will provide a detailed description and rubric (including due dates) for this assignment in class.

Grading Scale & Points

This course is graded on the traditional A – F letter grade scale only, it is not offered under the credit/no credit option. Upon completion of the course, your points earned on exams and policy reflection papers will be expressed as a percentage of total points possible in the course and translated into a letter grade as follows:

A 93-100%; A- 90-92%;
B+ 88-89%; B 83-87%; B- 80-82%;
C+ 78-79%; C 73-77%; C- 70-72%;
D+ 68-69%; D 63-67%; D- 60-62%
F 59% and below

Total points possible in the course = **350 points**

- Water Policy News/Current Events Assignment: 25 points
- Water Policy Engagement Assignments: 2 @ 25 points/each = 50 points
- Midterm Exam: 50 points
- Water Service-Learning Experience and associated assignments: 50 points
 - 25 points for actual experience/participation
 - 25 points for post-experience reflection paper
- In-class Activities and participation: 50 points
- Water Policy Briefing Paper: 75 points
- Final Exam: 50 points

Graduate Increment

Since this course is listed as a U/G (undergraduate and graduate) course at the University of Montana, graduate students can take the course as offered (NRSM 427) for credit with the completion of additional work known as a “graduate increment.” The graduate increment for this course will consist of three specific requirements:

1. Completion of additional readings per topic area as assigned by the instructor;
2. Completion of one additional “water book” over the semester (details provided in class);
3. One additional meeting (time/place TBD) with the course instructor, to pursue a discussion of graduate-increment book reading pursued by each graduate student.

Course Readings & Topic Schedule

I have designed this course as a series of sections or “topics” that are flexible and can be moved around. We will work through the material at a pace dictated by the interests of the class as a whole. We may spend one class period on a specific topic, or we may spend two weeks—this will be determined by student engagement and the relevance of the topic to understanding critical water policy issues in Montana and the greater U.S. West. ***Please be attentive to announcements in class and on Moodle as I update the schedule of assigned readings.*** I will post and update the reading schedule on Moodle regularly as well as announce changes in class. Please be sure you are working off the most updated schedule in Moodle or bring a copy of the schedule with you to class in order to record adjustments.

Tentative Course Topics & Order of Presentation

1. **Water Rights:** Riparian Rights & Prior Appropriation Doctrine
2. **Montana Water Administration:** the Montana Water Use Act of 1973 (MWUA); Conjunctive Management of Surface and Groundwater in MT
3. **Federal Reserved Water Rights** including Native American Reserved Water Rights and Indigenous Water Rights
4. **Navigable Waters & The Public Trust Doctrine:** Federal definitions, State limitations
5. **Misc. Water Policy:** Interstate Compacts; Federal hydropower licensing, relicensing, and dam removal; U.S. Water Treaties
6. **Environmental Legislation and Water:** The Clean Water Act (CWA) and The Endangered Species Act (ESA)
7. **Innovations in Water Policy:** Water sharing and the future of water policy in the U.S. and beyond

Important University Dates & Information

Important Dates Restricting Opportunities to Drop a Course Spring 2019:

Deadline	Description	Date
To 15 th instructional day	Students can drop classes on CyberBear with refund & no “W” on Transcript	September 16, @5 PM

Deadline	Description	Date
16 th to 45 th instructional day	A class drop requires a form with instructor and advisor signature, a \$10 fee from registrar's office, student will receive a 'W' on transcript, no refund.	September 17 – October 28 @5 PM
Beginning 46 th instructional day	<u>Students are only allowed to drop a class under very limited and unusual circumstances.</u> Not doing well in the class, deciding you are concerned about how the class grade might affect your GPA, deciding you did not want to take the class after all, switching majors, and similar reasons are not among those limited and unusual circumstances. If you want to drop the class for these sorts of reasons, make sure you do so by the end of the 45 th instructional day of the semester. Requests to drop must be signed by the instructor, advisor, and Associate Dean (in that order) so if you pursue this request, <i>leave sufficient time to schedule meetings with each of these individuals</i> (generally this will take at least 3-5 working days). A \$10 fee applies if approved. Instructors must indicate whether the individual is Passing or Failing the class at the time of request.	October 28 – December 6 @5 PM

See also [Fall 2019 Official Dates and Deadlines](http://www.umt.edu/registrar/calendar.php) (http://www.umt.edu/registrar/calendar.php) calendar