

Syllabus – Winter 2020

Water Quality Policy & Management (ESM 463/563)

<u>Date</u>	<u>Lecture - Readings - References</u>
1/7	Overview of Water Quality Management and Regulation in US & Oregon (EPA 2008 Ch. 2.1-2.3)
1/9	Water Quality Standards and Beneficial Uses for Conventional Pollutants – Temperature, Bacteria, & Turbidity (EPA 2008 Ch. 2.5; OAR 340-041)
1/14	Oregon Water Quality Standards: Toxic Chemicals – Human Health & Fish Consumption, Aquatic Life & Copper BLM (EPA 2016; OAR 340-041)
1/16	Water Quality Assessment: Oregon Integrated Report Methodology (EPA 2008 Ch. 2.4; DEQ-website; Integrated Report Methodology)
1/21	TMDL Process (EPA 2008 Ch. 2.4; Freedman et al., 2004) Oregon TMDL Process (OAR 340-042)
1/23	Use of Models for TMDL Development: Empirical & Mechanistic Model Overview
1/28	TMDL Implementation: Uncertainty & Adaptive Management (TBA)
1/30	Point Source Permitting: Individual & General; Industrial & Municipal Sources
2/4	Nonpoint Source Pollution & Water Quality Management Plans in Oregon (NPS Video; DEQ-TBA)
2/6	Urban Stormwater Management: MS4 Permits, Industrial Permits and DMAs
2/11	Agricultural Lands WQ – Oregon: Agriculture Water Quality Management Act
2/13	Agricultural Lands WQ – Other State’s Programs
2/18	Forest Lands WQ – Oregon: Forest Practices Act and Northwest Forest Plan
2/20	Forest Lands WQ – Other State’s Programs
2/25	WQ Trading: Clean Water Services, Ashland, and Medford Examples (TBA)
2/27	Klamath Basin WQ: Successes and Challenges (TBA)
3/3	Yakima River - DDT TMDL and Implementation
3/5	WQ Successes in Oregon: Columbia Slough, Tualatin River, Wilson River, Bear Creek
3/10	With and Without a TMDL: Willow Creek & Whychus Creek (Willow video; Whychus CEP)
3/12	Drinking Water Source Water Protection: Nexus between CWA and SDWA
3/12	Final Exam Assigned: Take Home - Due Thursday 3/19 by 5:00pm

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Assignments: 4 homework assignments (25 points each) = 100 points

Project (Due Thursday 3/5 by 5:00pm) = 50 points

Final Exam = 50 pts

Total Points = 200

Grading: 95-100 = A

90-94 = A-

85-89 = B+

80-84 = B

75-79 = B-

70-74 = C+

65-69 = C

60-64 = C-

Text Used for some lecture slides:

EPA. 2008. Handbook for Developing Watershed Plans to Restore and Protect Our Waters. USEPA Office of Water Nonpoint Source Branch.

Other readings and references as assigned

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