ST 518d Water as a Resource Web Course

2 Credit Hours

Prerequisites: ST 524 Survey of Chemistry and ST 523 Survey of Biology

Note: Students are encouraged to take ST530 OR ST530d Technical Communication for Teachers BEFORE taking ST577d or ST518d since students’ technical writing skills are considered when grading assignments to help prepare them for their final thesis project completion.

Instructor: Lynne Kurilovitch  
E-mail: ST518d@gmail.com  
Office phone: (520)237-5314 or (520)268-2163  
Office Hours: Monday 6-8pm

Course Designation: This course may be used to fulfill Chemistry or Biology requirements for the MST curriculum as outlined in your applicable course catalog. Other web readings are given on the assignment page for each module. Cited references and relevant useful links are supplied at the end of each module.

- New Distance Student requirements – contact George Becker or Iver Davidson for details
  - NMT now requires each distance student to provide valid photo ID to ensure that the person registered is indeed the person doing the work.
  - NMT accreditation rules now require distance instructors interact with their students visually to validate the above ID new rule.

Assignments:
- Readings are delineated on the assignments pages of each module in
  - the course textbooks
  - module content pages
  - related webpages

- Discussion participation
  - Post at least two replies per module
  - Lead the discussions for two modules
  - Discussion leaders must write at least two topics for their two modules = 4 discussion topics
  - Extra points given for extra topic submissions and for extra replies
  - Late replies earn half credit
  - Choose your modules to lead discussions within three days after registration closes
  - Instructor chooses thereafter

- Semester Projects
  - You must complete two projects this semester
  - Projects may include your own students or not
  - Choose projects from the Projects Page (reach from Main Menu) or propose your own
  - Each project requires a minimum 500-word proposal due before midterm (= two proposals)
Each project requires a minimum 1500-word final report due the Sunday of Finals week.

- **Tests**
  - No tests are given in the *Water as a Resource* Web Course.
  - Students are graded on their:
    - discussion participation
    - discussion topics
    - project proposals
    - final project reports

- **The Water as a Resource course content includes:**
  - physical properties of water
  - where, how, & why water occurs on Earth
  - the hydrologic cycle
  - water conservation & re-use
  - water resource sustainability, drought
  - water contamination and pollution
  - water technologies
  - politics, business, economics of water, problems with bottled water
  - current water issues
  - energy from water

- **Field Trips**
  - There are no class field trips this semester.
  - You may take your own students on a field trip or create a Virtual Field Trip for a project.
  - Using a field trip as a project requires the instructor’s permission and still requires a Project Proposal and a 1000 word final report (Instead of a 1500 word final report for regular projects).

- **Water as a Resource Course Goals:**
  - Students are expected to absorb an adequate understanding of water resources, as well as comprehend the politico-socio structures associated with water resources and use.
  - Teachers will learn invaluable material directly usable in their own classrooms to help fulfill New Mexico state curriculum requirements.
  - This course is meant to provide a basis for a further study of science content leading to a Master of Science Teaching (MST) degree or Green Certification and to prepare you for your MST thesis process.

- Assignment grades include consideration of technical communication skills; Students are expected to apply their writing and creative skills in an effective way worthy of a graduate student and to receive feedback from the instructor if they need feedback in these areas.

- Material presented includes resources that teachers can use in their own classrooms; Cited references and useful relevant links are supplied at the end of each module.
- Ultimate goal is for teachers to be able to teach water resources to their own students
- **Interact with the instructor** by email st518d@gmail.com or by phone – leave a message as to when and how to call you back at 520-237-5314

### Syllabus Spring 2016
ST518d Water as a Resource Web Course
*Note: Syllabus subject to change*

Required Text Books:
1. **Water, A to Z** by Leon Cooper ISBN #1-4134-3579-3 ~$22 at NMT bookstore or online
2. **Introduction to Water Resources and Environmental Issues**
   by Karrie Lynn Pennington and Thomas V. Cech ISBN #13:9780521869881 ~$60 at NMT bookstore or online

*Please acquire your textbooks ASAP, do your module & web readings & discussions even if your texts haven't come yet.*

### January 18-26 Spring 2016 Registration

<table>
<thead>
<tr>
<th>Jan 18 – Feb 1</th>
<th>(2-wk module)</th>
<th>Module 1</th>
<th>Overview of Water</th>
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<tbody>
<tr>
<td>Tue Jan 26</td>
<td>Registration closes/Last day to add or change courses until 5pm</td>
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<tr>
<td>Feb 2 - 9</td>
<td>(1-wk module)</td>
<td>Module 2</td>
<td>Water's Role in Earth Systems</td>
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<td>Fri Feb 5</td>
<td>Last day to drop courses</td>
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<tr>
<td>Sun Feb 7</td>
<td>Last day to choose modules to lead discussions, then Lynne picks</td>
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<tr>
<td>Feb 9 - 15</td>
<td>(1-wk module)</td>
<td>Module 3</td>
<td>Water Resources</td>
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<tr>
<td>Feb 16 - 29</td>
<td>(2-wk module)</td>
<td>Module 4</td>
<td>Water Quality</td>
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<tr>
<td>Mar 1 – Mar 14</td>
<td>(2 wk module)</td>
<td>Module 5</td>
<td>Water Supply &amp; Sustainability</td>
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<tr>
<td>Mon Mar 6</td>
<td>Project Proposals due by midnight, submit by email only, to <a href="mailto:st518d@gmail.com">st518d@gmail.com</a></td>
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<tr>
<td>Mar 14 - Fri Mar 18</td>
<td>Spring Break 2016</td>
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<td>Wed Mar 16</td>
<td>Mid-Semester</td>
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<tr>
<td>Mar 15 - 28</td>
<td>(2 wk module)</td>
<td>Module 6</td>
<td>Wastewater Treatment</td>
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<td>Mon Mar 27?</td>
<td>Instructor submits mid-term grades to registrar (based on proposal &amp; discussion participation, discussion leader grades only included in final grade calculations)</td>
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<tr>
<td>Mar 29 - Apr 4</td>
<td>(1 wk module)</td>
<td>Module 7</td>
<td>Business and Politics of Water</td>
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<td>Wed Apr 6</td>
<td>Grade Option Deadline</td>
<td>last day to withdraw or change to pass/fail or audit</td>
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<td>Apr 5 – 11</td>
<td>(1 wk module)</td>
<td>Module 8</td>
<td>Water in the News</td>
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<td>Apr 12 - 18</td>
<td>(1 wk module)</td>
<td>Module 9</td>
<td>Energy from Water - Geothermal</td>
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<td>Apr 19 - 25</td>
<td>(1 wk module)</td>
<td>Module 10</td>
<td>Energy from Water - Hydroelectric</td>
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<td>Apr 25 - May 2</td>
<td>(1 wk module)</td>
<td>Module 11</td>
<td>Energy from Water - Ocean/Tidal</td>
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<td>Sun May 8</td>
<td>Final Project Reports Due by midnight! email ONLY to <a href="mailto:st518d@gmail.com">st518d@gmail.com</a></td>
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<tr>
<td>Tue May 10</td>
<td>Last day to post discussion replies!</td>
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<tr>
<td>Fri May 13</td>
<td>End of semester</td>
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