English 855:  
Science, Communication and Public Engagement

Dr. William Keith  
Class: W 5:00-7:40  
Office: 495 Enderis Hall /  
Office Hours: By Appointment  
Mailbox: Curtin Hall, 4th floor (follow signs from elevator)  
E-mail: wmkeith@uwm.edu

Overview  
This course will be an introduction to science communication for practitioners. We will consider different theories of public communication of science and explore their strengths and weaknesses for practice.

Books  
David Stroh, Systems Thinking For Social Change, 2015

Other readings on Canvas

Course Learning Outcomes  
Successful students will be able to
- Applying alternatives to the deficit model and cognitive bias approaches to science communication.
- Explaining why “dumbing it down” is an inadequate way to approach science communication.
- Understanding what wicked problems are and how they are implicated in systemic change.
- Engaging journalists, policy makers, and community stakeholders as audiences.
- Designing cogent communication about solutions to wicked problems across multiple media and genres.
- Choosing communication goals effectively in a specific context.

Time Commitment  
Students should expect to spend 4-6 hours per week on assigned readings and researching examples. Weeks with written work due will require 2-3 additional hours.
Assignments

Full versions of all assignments will be posted to the course website, within the appropriate week’s Canvas module. Descriptions below are a sketch. Due dates for all assignments are provided on Canvas.

Graded Written and Oral Communication

**Project Proposal**: Overview of your group’s communication work for the term.

**Social Media Strategy**: An overview and justification for what you’ll be doing to promote your project.

**Social media & PR**: Podcast or Twitter, press releases, viral videos, etc.

**TEDx**: A brief informative presentation intended for viral consumption

**Policy Brief**: A written presentation of the background and rationale for a specific policy

**Science Advocate Presentation**: Presentation to a specific policy body advocating the adoption of a policy. Includes analysis of

**Science Broker Presentation**: Presentation to a specific policy body presenting and evaluating a range of policy options.

**Final Reflection** (Individual): A brief essay in which each student reflects on what they learned in the course and how they will use it.

Commitment

**Commitment**: 15% of the grade this semester will be based on the instructor’s judgment of your “commitment,” which represents your commitment to improving the learning environment for yourself and other students, during the discussions and any other class interactions; the instructor will keep track of each student’s participation and professionalism. Included in this assessment will be such behaviors as:

1. Reading all class discussions and materials on a weekly basis;
2. Participating in online and class discussions;
3. Providing thought-provoking, original, high quality comments;
4. Submitting assignments on time and in the proper formats;
5. Treating your classmates with respect;
6. Participating with enthusiasm and interest;
7. Being Fully Present: Not using a cellphone in class, and using a tablet or laptop for only class-related reasons.

% of Grade

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project proposal</td>
<td>5%</td>
</tr>
<tr>
<td>TEDx</td>
<td>10%</td>
</tr>
<tr>
<td>Social Media Plan</td>
<td>10%</td>
</tr>
<tr>
<td>Policy Brief + Bib (Ind)</td>
<td>20%</td>
</tr>
<tr>
<td>Science Advocate Presentation/Science Broker Presentation</td>
<td>15%</td>
</tr>
<tr>
<td>Social media &amp; PR</td>
<td>20%</td>
</tr>
<tr>
<td>Commitment (Ind)</td>
<td>15%</td>
</tr>
</tbody>
</table>
## English 890:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading</th>
<th>Work Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/22</td>
<td>Introductions Communication beyond deficits</td>
<td>Lewenstein CSE Chapter 1</td>
<td></td>
</tr>
<tr>
<td>2 1/29</td>
<td>Wickedness and Systems I</td>
<td><em>Systems Thinking for Social Change</em>; APSC “Wicked”</td>
<td></td>
</tr>
<tr>
<td>3 2/5</td>
<td>Systems II</td>
<td><em>Systems Thinking for Social Change</em></td>
<td></td>
</tr>
<tr>
<td>4 2/12</td>
<td>PR: Traditional and social media</td>
<td>Social Media guides CSE Chapter 2, 4 The Paramedic Method</td>
<td>Project Proposal</td>
</tr>
<tr>
<td>5 2/19</td>
<td>Politics of Science Communication I</td>
<td><em>Acting in an Uncertain World</em></td>
<td>Social Media Plan</td>
</tr>
<tr>
<td>6 2/26</td>
<td>Translation and dissemination</td>
<td>Brechman et al., WHOI, Lynch, et al., Collins</td>
<td>Policy brief</td>
</tr>
<tr>
<td>7 3/5</td>
<td>Public Engagement / Citizen Science</td>
<td><em>Organic Public Engagement</em> 3 &amp; 4;</td>
<td></td>
</tr>
<tr>
<td>8 3/12</td>
<td>The Modern Consensus</td>
<td>“Saving Science”; funding collection</td>
<td></td>
</tr>
<tr>
<td>9 3/19</td>
<td></td>
<td><strong>Spring Break</strong></td>
<td></td>
</tr>
<tr>
<td>10 3/26</td>
<td>Politics of Science Communication II</td>
<td><em>Honest Broker</em> Chaps 1-4</td>
<td>Social Media artifacts</td>
</tr>
<tr>
<td>11 4/2</td>
<td>TEDx</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 4/9</td>
<td>Politics of Science Communication II</td>
<td><em>Honest Broker</em> Chaps 5-8</td>
<td></td>
</tr>
<tr>
<td>13 4/16</td>
<td>Speaking/Writing/Designing</td>
<td>Duarte, Zen; Walker/Daniels; Hullman; Sweitzer</td>
<td></td>
</tr>
<tr>
<td>14 4/23</td>
<td>Advocate/Broker presentations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 4/30</td>
<td>Public Argument</td>
<td>Walker/Walsh, Paliewicz Aliciabar, Ceccarelli</td>
<td></td>
</tr>
<tr>
<td>16 5/7</td>
<td>Open</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Tuesday May 14, 5-7 pm Final Course event*
Learning Ensembles

Your presence in class is important not only for your learning and for the learning of your peers but also because our goal is to create a *Learning Ensemble* this semester—group of learners who support, trust, and share in the learning process.

An ensemble implies that there is a group of people who are all committed to achieving a similar goal and who support each other in pursuit of that goal. An ensemble implies a whole: A group of people collaborating together to produce something. Everyone plays an important role in getting the group toward the goal.

Learning works best in an ensemble, it is a team sport.

- Learning in this class is not about the professor dumping information for you to regurgitate.
- It's about all the participants engaging in an ongoing conversation and working together to explore new knowledge and to move that conversation forward and make connections to our individual and collective experiences.
- We are not in competition with one another.
- Learning is not a scarce resource that we have to divide between ourselves—there is plenty of learning for all of us.
- We aren't trying to defeat anyone in the class or out-perform one another.
- We should all strive to help everyone get to the end of the course successfully.

In an ensemble each person benefits and grows because they interact with other people who bring different ideas and skill sets. An ensemble is about learning from others and making each other shine.

Policies

Turning in assignments

You must turn in all written work to the appropriate dropbox by the dropbox deadline in order to pass the class.

Policy on late work

Once the deadline has passed, one letter grade will be deducted from the grade for each 24-hour period that it is submitted late, until the deadline. To receive full credit, all assignments are due by the date and time indicated in the syllabus.
### On the days you are scheduled to speak

In order for a class with presentations to function effectively, there must be both a speaker and an audience present for performances. Therefore, it is imperative that you attend class on speaking days. Due to the difficulty of verifying excuses, and the possibility that some students may be less than honest, there will be almost no excuses accepted for speaking days. Basically, if you don’t show up on the day you are assigned to speak, you will get a zero for that assignment.

### Formats

All written work (unless otherwise noted) must be saved in Word, and must be submitted to the appropriate CANVAS Dropbox. Materials in other formats, or submitted to the instructor via e-mail, will NOT be accepted.

### Syllabus modification

In the event that some modification is needed, advance notice will be given. Please regularly check the class website for any modifications that may be made.

### Academic Misconduct

Acts of plagiarism and cheating represent serious acts of misconduct. You are expected to abide by general UWM rules and regulations regarding academic misconduct. Misconduct includes, but are not limited to, cheating on exams and knowingly presenting the work of others as though it was your own, including copying language from others, and using the ideas of others without acknowledging your sources in papers and presentations. You should label any work that is not your own, using a standard citation style. When in doubt, ask whether, and how, to cite a source. Work turned in for credit in other courses may NOT be turned in for credit in this course.

https://www4.uwm.edu/dos/conduct/academic-misconduct.cfm

### Additional policies

**Students with disabilities.** Students with disabilities requiring accommodation should contact the Accessibility Resource Center (ARC) as soon as possible to secure the necessary documentation. Additional information is available on the ARC website.

http://www4.uwm.edu/sac/SACltr.pdf

**Religious observances.** Accommodations for absences due to religious observance shall be made available according to applicable UWM policies.

http://www4.uwm.edu/secu/docs/other/S1.5.htm

**Students called to active military duty.** Accommodations for absences due to call-up of reserves to active military duty should be made available according to applicable UWM policies.

http://www4.uwm.edu/current_students/military_call_up.cfm
**Incompletes.** An "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work.

http://www4.uwm.edu/secu/docs/other/S31.pdf

**Discriminatory conduct** (such as sexual harassment). Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff.

http://www4.uwm.edu/secu/docs/other/S47.pdf

**Complaint procedures.** Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy.

http://www4.uwm.edu/secu/docs/other/S49.7.htm

**Grade appeal procedures.** A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the English 205 Business Writing Page 5 respective department chairperson or the Academic Dean of the College/School.

http://www4.uwm.edu/secu/docs/other/S28.htm