Instructor: M. Ann Brady, PhD
Associate Professor, Rhetoric & Technical Communication
Director, Scientific & Technical Communication
Office: 329-A, Walker Arts & Humanities
Office Hours: 3-4 pm M; 2-3 pm T; by appointment
Email: mabrady@mtu.edu
Extension: 7.2066

Required Texts: Best American Science and Nature Writing 2013, Siddhartha Mukherjee (Mariner Books)
Ghost Map, Steven Johnson (Riverhead Books)
Writing Science, Joshua Schimel (Oxford UP)
Additional required PDFs and web readings, available on Canvas

Class List: hu4693-r01-sp14-l@mtu.edu

Course Description: Science writing is a bridge between two communities: the scientific and the civic. Doing it well means knowing how to tell a compelling story and how to do the research that makes the story credible. Doing it well also depends on an awareness of complex audiences, some of whom love to learn about science and others who use scientific information to enhance their lives or apply it practically.

Stories about technology, sustainability, advances against disease, a deeper appreciation of the natural world, and the latest nutrition studies fill our pages and airwaves. Yet these reports often lack perspective or a skillful approach to help us grasp their significance. HU 4693 is thus designed to broaden your understanding of science writing and to guide you as you work toward becoming science writers.

Course Goals:
• Introduce you to 20th and 21st century science writers, be they scientists, nonfiction writers, or journalists
• Highlight the genres and strategies these writers use
• Foreground the audiences who read science writing, their purposes and needs
• Examine the backbone of science writing: narrative, rhetoric, and research
• Give you practice in generating science stories and in communicating them through a range of genres and media
• Engage you in the research necessary to tell these stories

Email: Email me whenever you have a question about this class. I use MTU’s Google email, not the Canvas internal email/messaging system. Please use your MTU Google account, not the internal Canvas system, when mailing me.

Canvas: All course materials, including this syllabus, the calendar, selected readings, web


links, and assignments are posted on Canvas. I do not use the internal Canvas calendar or assignment/grading systems; you will find our calendar and assignments on the home page. Check daily for announcements and discussion board posts.

Readings: I expect you to read what’s assigned on the calendar before the class meets and to be prepared to actively and thoughtfully discuss the topics. Additional readings may be assigned during the semester for which you will be responsible. Expect to take quizzes and to respond to readings in Canvas discussion posts.

Projects: Although I may modify the projects and due dates during the semester, I plan to ask you to:

- Analyze two published scientific papers
- Design a poster, accompanied by an abstract, exposing a scientific fallacy
- Produce a podcast investigating a scientific controversy
- Take field notes on a subject that interests you, report them using your choice of media, and write about them in an essay
- Lead discussions

Your documents will typically go through a cycle that includes a proposal, a peer-reviewed rough draft, comments from me, and a final draft accompanied by a self-assessment memo.

- Proposals will indicate your audience, purpose, and goals.
- Peer reviews are essential since they prepare you for the collaborative and critical work of document production. Since the reviews are a privilege and a responsibility, use them well. Come prepared, be clear, specific, and complete in your assessment of your peers’ work, and expect the same for your own.
- I’ll review your work by email using the comment function. That means that you’ll need to send me your drafts as docx attachments and then look for my response in your inboxes.
- Self-assessments will indicate what you consider strengths in what you’ve produced, what you’d change about it, and what you’ve learned.

Writing and research teams: Throughout the semester, you’ll engage in several different collaborative projects, some of them as writers and designers exchanging reviews of drafts, others of them as researchers contributing to the investigations of scientific controversies and fallacies.

Late work: I do not accept late work.

Replacement work: Keep electronic copies of your work since you are responsible for it should it be misplaced.

Academic honesty: Unless the assignment calls for a collaborative effort, I assume that the work you submit is yours. If you are referring to, or using, other sources, including your own work for another class or project, remember to acknowledge them, using proper form. Evidence of copied or plagiarized work is cause for serious disciplinary action by the University.
Attendance: I expect you to attend every class meeting, ready to participate fully and thoughtfully. If you miss more than four of our classes—two weeks—I will drop your final grade. If you must be absent, please email me or speak with me in person.

MTU’s Policy on Discrimination and Harassment: MTU complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act (ADA) of 1990. If you have a disability and need reasonable accommodation for equal access to education and services at MTU, please call Dr. Bonnie Gorman, Dean of Students (7.2212). For other concerns about discrimination, you may contact Dr. Jill Hodges, Director, Office of Institutional Equity (7.3310), your advisor, or your department chair.

Safe Place: I am a member of Safe Place and thus expect people to be respectful of one another in any class I teach.

Here is the mission statement: “The GLBT Safe Place Program strives to reduce homophobia and heterosexism on Michigan Tech’s campus. Through education, advocacy, and awareness, the program contributes to an open campus climate that is safe and accepting to all members of the University community.”

Grading: If you have questions about your grade at any time during the semester, let me know so that we can discuss them.

Grading Rubrics: I do not use points when grading. Instead, I use the following rubrics.

A—excellent. A work is an example of highly effective professional writing. It makes its purposes clear, reflects concern for its audience’s needs and responses, and is detailed, persuasive, effectively organized, exhibits appropriate format and tone, and is grammatically correct.

B—good. B work is effective and would succeed in most professional communication circumstances. It may lack the polish or effectiveness of an A.

C—adequate. C work is effective though it lacks features necessary to succeed completely with a professional audience. Its purpose may not be entirely clear, it may not be effectively organized, it may not exhibit an appropriate tone or format, or it entails grammatical errors that make it difficult to read or understand than necessary.

D—poor. D work does not communicate effectively for several reasons. It may display an inadequate understanding of purpose or audience. It may lack information or be unpersuasive. Its organization may be confusing or misleading, and its tone or format may be inappropriate. It may be difficult to understand or contain serious errors in grammar.

F—unacceptable. F work does not satisfy the requirements of the assignment.
<table>
<thead>
<tr>
<th>Grade</th>
<th>A—Excellent</th>
<th>B—Good</th>
<th>C—Adequate</th>
<th>D—Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meets assignment</td>
<td>Yes</td>
<td>Yes</td>
<td>Most aspects</td>
<td>Significant gaps</td>
</tr>
<tr>
<td>Argument</td>
<td>Interestingly and clearly advanced</td>
<td>Clearly advanced</td>
<td>May be good, but only implied</td>
<td>Ambiguous or absent, generic or trite</td>
</tr>
<tr>
<td>Support</td>
<td>Valid and sufficient support</td>
<td>Some gaps or weak support</td>
<td>Some support, but weak or not clearly relevant</td>
<td>Poor support or connections not shown</td>
</tr>
<tr>
<td>Insight</td>
<td>Original and creative</td>
<td>Demonstrates thought</td>
<td>Conventional or generic</td>
<td>Superficial or incomplete</td>
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<tr>
<td>Organization</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Logical ordering</td>
<td>Establishes and follows a pattern</td>
<td>Follows a pattern</td>
<td>Generally follows a pattern; some gaps</td>
<td>Unapparent pattern or hard to follow</td>
</tr>
<tr>
<td>Paragraphs</td>
<td>Coherent and unified</td>
<td>Usually coherent and unified</td>
<td>Some not coherent or unified</td>
<td>Incoherent or lacking unity</td>
</tr>
<tr>
<td>Transitions</td>
<td>Provided as needed</td>
<td>Provided as needed</td>
<td>Sometimes missing</td>
<td>Enough missing to cause confusion</td>
</tr>
<tr>
<td>Style</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentences</td>
<td>Correct and varied, according to meaning</td>
<td>Correct, with some variety</td>
<td>Correct, but elementary</td>
<td>Surface errors, such as comma splices or fragments</td>
</tr>
<tr>
<td>Diction</td>
<td>Precise, correct, creative</td>
<td>Correct</td>
<td>Some debatable word choices</td>
<td>Frequent misuse of words</td>
</tr>
<tr>
<td>Spelling</td>
<td>Correct</td>
<td>Correct</td>
<td>Very few mistakes</td>
<td>Misspellings confuse meaning</td>
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