NatSci 289H-01: Integrated Scientific Communication  
iCons 2 Biomedicine (i2b)  
Spring 2020

**iCons 2b: It Takes a One Health Village!**

The One Health initiative: “recognizes that the health of people is connected to the health of animals and the environment. It is a collaborative, multisectoral, and transdisciplinary approach—working at the local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment”. -cdc.gov

**Instructional Team:**
Ally Hunter, College of Education Furculo S119 (hunter@umass.edu)  
Christine McGrail, College of Education, Furculo S119 (cmcgrail@umass.edu)

**Place/Time:** Integrated Science Building 321, Tuesday/Thursday, 10:00AM-11:15AM

**Office Hours:** By Appointment; send us an email or chat after class to set them up.

**Junior Year Writing:** This course is qualified by the Faculty Senate Writing Committee to satisfy the Junior Year Writing requirement for participating majors. For more information on participating majors, please consult the iCons director.

**Pre-requisites:** iCons 1 and College Writing (ENG 112) are the pre-requisites for iCons 2.

**Course Description:**

The focus of iCons 2 is honing the skills of 21st Century scientific communication: communicating to STEM professionals in our own field, with STEM professionals in other fields, and with non-STEM audiences like the general public. In the first half of the course, under the broad “One Health” worldview, we will practice reading, writing, and communicating about science with a focus on the general public as our audience. Our focus on “One Health” will be tethered to real world problems and issues surrounding food, water, environment, microbes, and human and animal health. In the second half of the course, we will switch to team-based work and focus on formal genres of scientific writing and communication for a scientific audience. Students will generate their own topics of interest and as a class we will vote to narrow down topics and create teams for final group writing and presentation work.
Each student tailors i2b to their interests and needs by choosing two of their own learning goals upon which their progress will be measured as well as their own topics and problems to explore. Because this is a writing intensive course, students will spend time on both individual writing products (first half of course) as well as a group writing product and presentation (second half of course).

**Overall Course Structure:**

<table>
<thead>
<tr>
<th>Component</th>
<th># of Weeks</th>
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</thead>
<tbody>
<tr>
<td>Scientific Communication Skills Individual Development</td>
<td>~6.5</td>
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<tr>
<td>Proposals for Project Topics</td>
<td>1</td>
</tr>
<tr>
<td>Group Project Work Leading to Final Presentations</td>
<td>~5.5</td>
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**Learning Outcomes:** Upon completion of this course, students will be able to demonstrate the following critical skills within the context of the biological and biomedical fields:

Core Goals (required of all students):

1. Write effectively and clearly, individually and as a team.
2. Deliver effective and clear oral presentations.
3. Work collaboratively and synergistically in a group or team setting.

Student Choice Goals (choose 2): While the course activities will work to build all of these outcomes, choose 2 that you personally want to focus your development on.

4. Create clear and effective visual presentations.
5. Communicate science effectively with both scientists and non-scientists.
6. Research, explain, and support scientific claims using evidence from the literature.
7. Articulate societal problems and solutions effectively with writing and presentations.

**Course Deliverables:**

**Individual Writing Assignments**

- Cover letter & Resume
- Short jargon-free passage
- Profile Piece
- Science Tweet
- Article Review: “Academic Minute”
- Writing from Sources: “Life Science” Blog Post
- Project Pitch
- Course Reflection (end of course reflect on iCons Goals)

**Group Assignments**

- Project Proposal
- Presentation
Class Participation and Engagement
In addition to the above assignments, you are expected to attend class and participate. Attendance will be recorded and reflected on as part of your grade. In addition, there will be tasks that will count toward your overall participation grade. (For example, coming prepared for class by having completed readings; completing rough drafts for peer review workshops). While these will not result in a grade, they will be noted as a complete or incomplete. **In the end, attendance and participation data will provide evidence to support whether or not you met your course goals. Be vigilant about attending class and participating in and out of class.** Of course, illness and emergency are part of life and we will accommodate excused absences. **Please contact us if you are going to miss class and also be sure to contact any group members or peers that may be counting on you for class activities or group work.**

**iCons 2b Grading Scheme:**
Students will pick their goals from the menu above and communicate those goals in the first week of the course. Then at the end of the course, the instructors will evaluate “evidence” for how, when, and where these goals were met. Students will make a final “argument” for this in their final i2b reflection. The course instructors will consider the evidence (assignment scores, attendance, participation, and revisions) and assign grades according to the following criteria for three goal areas: Core Goals, Choice Goal 1 and Choice Goal 2:

- Excellence in all three areas: A  
- Excellence in two areas and Strength in 3rd: A-  
- Excellence in one area and Strength in other 2: B+  
- Strong in all three areas: B  
- Strong in only two areas: B-  
- Strong in only one area: C+  
- Strong in no area, with effort: C  
- Strong in no area, without effort: D  
- No-show: F
Appendix II: Student Contract

(Retain this copy for your records)

Please initial before each statement, acknowledging that (i) you have carefully read the syllabus, and (ii) you understand your responsibilities in this course and the way your work will be evaluated. Please sign the bottom of the sheet and return it during the next class meeting.

_______ I have carefully read and understood this entire syllabus.

_______ I will adhere to the highest standards of academic honesty.

_______ I will attend every class unless I am ill or have extraordinary circumstances.

_______ I understand how my performance will be evaluated, and how my grade will be earned.

My choice goals are # ______ and # _______.

_______ I know that help is available to me outside of class through (1) instructor office hours, (2) other experts at UMass Amherst and beyond, and I will seek that help if I determine such help is necessary.

Name: ___________________________________________ Student ID Number: _________________

Signature:__________________________________________________________________________
Appendix III: Student Contract (Detach and submit this copy for my records)

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