SCIE 300 Communicating Science
January 2012

Credits and hours:
Credits: 3
Standing: 3rd- or 4th-year standing required
Co-requisite: One of BIOL 300, STAT 200, or STAT 241
Hours: Three hours of class time is scheduled each week. You should budget five additional hours per week for homework, assignments, and readings.
Calendar entry: SCIE 300

Dates, times, and location:
ALL SECTIONS (210, 212 and 201): Tuesday 12:30–1:30, CHEM D200
Section 210: Monday, Wednesday, and Friday 10:00 am, GEOG 214
Section 212: Monday, Wednesday, and Friday 12:00 pm, IBLC 185
Section 201: Monday, Wednesday, and Friday 1:00 pm, IBLC 185
Class starts Wednesday, January 4; Class ends Wednesday, April 4
Reading week is February 20–24

Summary:

	Monday	Tuesday	Wednesday	Friday
Section 210	10:00 GEOG 214	12:30 CHEM D200	10:00 GEOG 214	10:00 GEOG 214
Section 212	12:00 IBLC 185		12:00 IBLC 185	12:00 IBLC 185
Section 201	1:00 IBLC 185		1:00 IBLC 185	1:00 IBLC 185

Class descriptions:
Mondays: SCIE 300 has two major group projects. We know that finding time to work in your groups can be challenging, so the Monday time slot is reserved mainly for this purpose. There will be no formal instruction or assessment on these days, so attendance is optional, but we encourage you to use this scheduled time to meet with your groups. An instructor and/or TA will be present to answer questions and provide guidance. On a couple occasions, we will use this time to hold optional software tutorials.
Tuesdays: The main instructional day for SCIE 300 and the day that will be used for guest lectures.
Wednesdays and Fridays: These days are used for in-class activities (e.g. writing skills) and discussions that will usually build upon the Tuesday classes. We also use these classes for individual and group presentations.

Course description:
Welcome! You are part of a new course within the Faculty of Science at UBC. The overall goals of SCIE 300 are to illustrate the importance of communicating scientific information and provide you with some of the skills you need to become good science communicators. Wherever your career takes you, communication skills are highly valued, transferable, and arguably more important than even before.

SCIE 300 is an interactive course divided broadly into two main sections: communicating science within the scientific community and communicating science to broader non-expert audiences. Communicating about science in any form involves some type of writing. So, unsurprisingly, there will be a lot of writing in this course. But you will not be writing long essays. We will cover the structure of scientific papers and the peer-review process. You will have the chance to write reports on your own research, summarize other people's research, and apply methods you can use to present your data so that they are clear, support your arguments, and are not misleading. In addition, you will have at least three opportunities throughout the term to give presentations. A library session will focus on performing good literature searches and using online citation managers, such as RefWorks.

Thinking about reaching broader audiences, you will explore online science communication, contribute to a course blog, and write scripts for the audio and video pieces you will create. This part of the course will feature science journalism and storytelling. You read that correctly – there will be storytelling and you will get to read the news in a third-year university course. Could there be a better course? The catch – *you* will be telling the stories and writing the news. You will explore the similarities and differences between science and journalism and learn the basics of writing in journalistic style. Best practice examples of using audio and video to tell science stories will be discussed and your own creations will be shared on the course blog. With a little luck, SCIE 300 will make you famous. Well, maybe with a lot of luck, but if you set high goals for yourself, you will learn a lot in this class.

Required handbook and online resource:
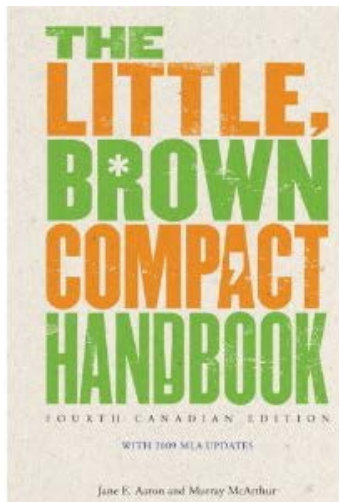
This writing handbook is required for the course. Both the physical copy and the e-text are acceptable.

The Little, Brown Compact Handbook, Fourth Canadian Edition
Jane E. Aaron and Murray McArthur

You also need access to the online resource MyCanadianCompLab. This comes with the purchase of the physical book or you can buy an access code.

Please refer to the "Course Materials" document on Blackboard for more information on both of these resources and for instructions on getting started with MyCanadianCompLab.

SCIE 300 assessment summary:
In-class worksheets and activities: 3%
Library research assignment: 2%
Short, individual presentation: 3%
Writing assignments: 7%
Blog posts: 9%
Scientific investigation project: 28%
Science outreach project: 28%
Fusion Project: 20%

Participation:
Your success in this course is highly dependent on your level of participation. Your colleagues' success and stress level are also dependent on your participation. A blog cannot work without everyone's input. Class discussions and group activities without group engagement will be unfulfilling. Peer assessment that is not handled professionally is unconstructive. So, please do your part for the course: attend class, participate, and do your fair share of group work. We have not allocated a specific amount of your final grade for participation, but in-class activities will be collected and count towards 3% of your grade.

Learning objectives:
By the end of this course a successful learner will be able to:
A. Communicate scientific information to scientific audiences, specifically:
    1. Compose well-written documents at the senior undergraduate level in scientific style
    2. Participate in a presentation as both presenter and audience member
    3. Communicate numerical information visually to scientific audiences
    4. Communicate scientific information using multimedia and Web technologies
B. Communicate scientific information to non-expert audiences, specifically:
    1. Compose well-written documents at the senior undergraduate level in journalistic style
    2. Participate in a presentation as both presenter and audience member
    3. Communicate numerical information visually to non-expert audiences
    4. Communicate scientific information using multimedia and Web technologies
C. Critically appraise scientific information and reporting, specifically:
    1. Analyze formats for communicating science, e.g. scholarly articles, news reports, blogs
    2. Explain critical factors that impact how science is communicated
    3. Evaluate scientific information from various sources

Evaluating SCIE 300:
SCIE 300 is a new course. This is the third term it has been offered. So, your feedback is very important for making improvements to future offerings of the course. In order to evaluate the success of this course, we will need your input. We will ask you to complete surveys about the course and we hope that you will respond to them. We may also ask you to participate in interviews and focus groups. We want to know if the course is meeting your expectations, if you have suggestions for improvements, and if there are topics you think should be included in future versions of the course. We will be in touch a few times throughout the term asking for your help, but feedback at any time is welcome.

Instructors:
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Library visit:
We'll remind you again later, but please mark *Wednesday, January 18* (Sections 212 and 201) and *Friday, January 20* (Section 210) in your calendars. On these days, the class will be held in the newly refurbished and very fancy *lower level computer lab of Woodward Library*.

Professionalism:
Whether you are working with a publisher on a research paper or book, submitting an article to a newspaper or magazine, or contributing an abstract to a conference, deadlines are extremely important. Likewise for SCIE 300.

The two major assignments in SCIE 300 have many small components due before the final project deadlines. The assignments are designed in this manner so that you receive feedback during the process and to help keep you on track. The assignment steps have hard deadlines. They must be met or you will receive a mark of zero for that component of the project. You are still eligible for full points in the remainder of the project components. However, by failing to submit the earlier project steps you forfeit those points and valuable feedback from your peers, instructors, and TAs that will help you complete the subsequent steps. Only final assignment submissions will be accepted late, but will carry a penalty of 10% reduction in mark per day, up to a maximum of five days.

Should you miss a class on which an assessment is made (for example, on one of your presentation days) or fail to meet one of the hard deadlines, you must have an acceptable excuse and supporting documentation (for example, a doctor's note) in order to obtain an extension without penalty. The only acceptable excuses are illness, serious family emergency, or a major religious holiday. Whenever possible, you should let the instructor and your group members know of your absence in advance. Attendance is expected at all classes, team meetings, workshops and scheduled activities. Do not schedule interviews, meetings, or other events during class times. Also, please arrive on time for every class.

Please see the separate document "Assessment Regulations, SCIE 300" for further details.

Academic integrity:
Plagiarism and other academic dishonesty will not be tolerated in SCIE 300. Present only your own ideas or, when presenting other people's ideas, cite the appropriate source. Course work must be completed independently or, in the case of group work, equally distributed among group members. The UBC Learning Commons has a wealth of information on academic integrity. Please visit this website and familiarize yourself with the difference between quoting and paraphrasing as well as the correct way to cite sources. There is also an entertaining and interactive animation you can watch.
http://learningcommons.ubc.ca/get-study-help/academic-integrity/
To test your knowledge, please complete this short quiz.
http://www.bio.ucalgary.ca/undergrad/plagiarismquiz.html
Plagiarism and dishonesty is not only something we think about at universities. Here is a real-world example of the trouble plagiarism can get you in.
http://www.gazette.com/articles/gazette-58112-stories-four.html

Blackboard Learn:
SCIE 300 is participating in the trial run of UBC's new learning management system called Blackboard Learn. So, instead of a WebCT Vista site, the course has a Blackboard site. You'll see that Blackboard is very similar to Vista so we don't anticipate any major issues with the transition. Nonetheless, your participation and feedback are an important part of the pilot phase of this system. To get started on Blackboard, go to http://lms.ubc.ca/, log in with your CWL, and look for SCIE 300 Communicating Science.

It is your responsibility to check the Blackboard site for announcements. We will do our best to remind you in class, but checking Blackboard at least once per week is the best way to stay informed. The Blackboard site will serve as a repository for lecture notes, handouts, assignments, grading rubrics, and some other resources. We'll do our best to post any slides or handouts from class onto Blackboard by the next day at the latest. Many of your assignments will be submitted through Blackboard.

The discussion board and email can also be used on Blackboard, just like on Vista. If you have a general question about the course, we encourage you to use the discussion board because many other students probably have the same question. In addition, you may get a faster answer from your peers than by emailing your instructors. If you have a question that is more personal, you are of course welcome to email the instructors.

Blog:
SCIE 300 has a course blog! If you have not already registered on UBC Blogs and joined the SCIE 300 blog, please do so as soon as possible. Please refer to the separate document on the Blackboard site for instructions on signing into the course blog, including the required password.

Peer assessment:
Peer assessment will be used a few times throughout the term and must be performed in a constructive, respectful manner. First, your presentations will be peer assessed as well as assessed by your instructors. Also, the final written portion of your first major assignment will go through a round of peer review. You will then be able to use this feedback when preparing your final draft of the paper.

Finally, the two major assignments in SCIE 300 involve group work. To minimize any unfairness that can occur in group work scenarios, you will have the opportunity to peer assess the contribution of your fellow group members to the projects.