COURSE OUTLINE

1. Course: SCIE 311, Write & Review Scientific Reports - Fall 2022

Course Outcomes:

- Reading scientific papers and identifying key conclusions in order to write a well-supported argument
- Searching for scientific information using a wide range of library skills and properly documenting those sources
- Recognizing milestones in the writing process and beginning to develop a personal approach to any writing assignment
- Identifying essential formatting and style elements of scientific writing
- Giving and receiving peer feedback throughout the writing process by working effectively as part of a team.

Lecture 01: TR 09:30 - 10:45 in EDC 252

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Bronwen Wheatley</td>
<td><a href="mailto:bmmwheat@ucalgary.ca">bmmwheat@ucalgary.ca</a></td>
<td>403 220-8077</td>
<td>SA 144C</td>
<td>please e-mail</td>
</tr>
</tbody>
</table>

Lecture 02: TR 14:00 - 15:15 in TRB 102

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jason Droboth</td>
<td><a href="mailto:jason.droboth@ucalgary.ca">jason.droboth@ucalgary.ca</a></td>
<td>TBA</td>
<td>ES 507</td>
<td>Tuesdays 15:30-17:00</td>
</tr>
</tbody>
</table>

Coordinator(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
<th>Office</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Bronwen Wheatley</td>
<td><a href="mailto:bmmwheat@ucalgary.ca">bmmwheat@ucalgary.ca</a></td>
<td>403 220-8077</td>
<td>SA 144C</td>
<td>please e-mail</td>
</tr>
</tbody>
</table>

To account for any necessary transition to remote learning for the current semester, courses with in-person lectures, labs, or tutorials may be shifted to remote delivery for a certain period of time. In addition, adjustments may be made to the modality and format of assessments and deadlines, as well as to other course components and/or requirements, so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff).

In Person Delivery Details:

SCIE 311 lectures and tutorials are run entirely in-person, on campus.

Re-Entry Protocol for Labs and Classrooms:

To limit the spread of COVID-19 on campus, the University of Calgary has implemented safety measures to ensure the campus is a safe and welcoming space for students, faculty and staff. The most current safety information for campus can be found here.

Course Site:

D2L: SCIE 311 L01-(Fall 2022)-Write & Review Scientific Reports

Note: Students must use their U of C account for all course correspondence.

Equity Diversity & Inclusion:

The University of Calgary is committed to creating an equitable, diverse and inclusive campus, and condemns harm and discrimination of any form. We value all persons regardless of their race, gender, ethnicity, age, LGBTQIA2S+ identity and expression, disability, religion, spirituality, and socioeconomic status. The Faculty of Science strives to extend these values in every aspect of our courses, research, and teachings to better promote academic excellence and foster belonging for all.

2. Requisites:

See section 3.5.C in the Faculty of Science section of the online Calendar.
Prerequisite(s):
Any 200-level course offered by the Faculty of Science.

Note(s):
a. Only declared majors in Chemistry, Applied Chemistry, Geology, Applied and Environmental Geology, Petroleum Geology or the Geosciences program will be admitted prior to the date registration restrictions are lifted. Consult the Enrolment Services website (http://www.ucalgary.ca/registrar/) for registration details.

3. Grading:

The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

<table>
<thead>
<tr>
<th>Course Component</th>
<th>Weight</th>
<th>Due Date (duration for exams)</th>
<th>Modality for exams</th>
<th>Location for exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-tutorial responses&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-class responses&lt;sup&gt;2&lt;/sup&gt;</td>
<td>4%</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iRAT 0</td>
<td>1%</td>
<td>Sep 08 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRAT 0</td>
<td>1%</td>
<td>Sep 08 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question Assignment</td>
<td>2%</td>
<td>Sep 14 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iRAT 1</td>
<td>1%</td>
<td>Sep 15 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tRAT 1</td>
<td>1%</td>
<td>Sep 15 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection 1</td>
<td>3%</td>
<td>Sep 16 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encountering Academic Integrity Assignment</td>
<td>2%</td>
<td>Sep 16 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Contract</td>
<td>1%</td>
<td>Sep 23 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Plan Assignment</td>
<td>10%</td>
<td>Sep 28 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iRAT 2</td>
<td>1%</td>
<td>Oct 06 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tRAT 2</td>
<td>1%</td>
<td>Oct 06 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mid-semester ITP Metrics peer evaluation</td>
<td>2%</td>
<td>Oct 07 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection 2</td>
<td>3%</td>
<td>Oct 14 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 1 TA review</td>
<td>4%</td>
<td>Oct 17 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 1 Instructor review</td>
<td>10%</td>
<td>Oct 17 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iRAT 3</td>
<td>1%</td>
<td>Oct 20 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tRAT 3</td>
<td>1%</td>
<td>Oct 20 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection 3</td>
<td>3%</td>
<td>Nov 04 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 2 Instructor review</td>
<td>10%</td>
<td>Nov 04 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 2 TA review</td>
<td>8%</td>
<td>Nov 04 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iRAT 4</td>
<td>1%</td>
<td>Nov 17 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tRAT 4</td>
<td>1%</td>
<td>Nov 17 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 3 Instructor review</td>
<td>16%</td>
<td>Nov 30 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Version 3 TA review</td>
<td>2%</td>
<td>Nov 30 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reflection 4</td>
<td>3%</td>
<td>Dec 06 2022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>end-of-semester ITP Metrics peer evaluation</td>
<td>2%</td>
<td>Dec 06 2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>1</sup> Your TA will ask you to participate in tutorial most likely by filling out an exit slip, but perhaps also by answering specific questions or having a brief conversation, completing a small in-tutorial exercise, etc. These will be graded pass/fail and will be added together to generate this 5% grade.

<sup>2</sup> Your instructor will ask you to participate in lecture by asking for your team responses to certain questions posed in class. These might involve submitting responses to TopHat, filling out an exit slip, but perhaps also by answering specific questions or having a brief conversation, completing a small in-tutorial exercise, etc. These will be graded pass/fail and will be added together to generate this 4% grade.

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student’s grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.
The conversion between a percentage grade and letter grade is as follows.

<table>
<thead>
<tr>
<th>Minimum % Required</th>
<th>A+</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>C-</th>
<th>D+</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
<td>90</td>
<td>86</td>
<td>82</td>
<td>78</td>
<td>74</td>
<td>70</td>
<td>66</td>
<td>62</td>
<td>56</td>
<td>50</td>
</tr>
</tbody>
</table>

Your grade is determined by marks for both individual work and team-scored components (consisting of all five tRATs, the Team Contract, and the in-class activities).

At the end of the term, you will evaluate the contributions of the other members of your team using an online survey. Each team member will rate you using parameters relating to teamwork. We calculate the average of these ratings and determine your Peer Evaluation Score (PES) based on your teammates’ evaluation. Your total team-scored component score (your tRAT, Team Contract, and in-class responses scores) will be multiplied by the PES to determine the final mark for the teamwork component of the course.

Communication, both oral and written form, is the cornerstone of this course, and the quality of your writing will factor into the evaluation of all assignments. Constructive critical analysis of peer work is also an essential course component. Attendance and active participation in all classes and tutorials will be key to your success in this class. The Detailed Syllabus for Science 311 is provided in this document and also as a separate file on D2L. Assignments should be submitted electronically. Further details about these requirements will be provided in class and on D2L. A detailed calendar and schedule is provided on D2L.

The University of Calgary offers a flexible grade option, Credit Granted (CG) to support student’s breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade

4. Missed Components Of Term Work:

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, one possible arrangement is that the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course. This option is at the discretion of the coordinator and may not be a viable option based on the design of this course.

In order for the peer review process to be successful, your work must be completed on time (and sometimes brought to class). Depending on the type of peer review (in-class or electronic), you will not be able to participate if you do not bring a copy of your work to class or if your work is not submitted on time. Therefore, if your paper is late/not brought to class, you may not be able to participate in the review process and may forfeit the grades associated with this assignment. Valid reasons for missing a deadline are the same criteria as those for deferred finals: documented cases of serious family afflictions or illness. In these cases only, you will be granted an excused absence or extension and you will not be penalized provided that you contact the Course Coordinator within 48 hours. Your overall mark for the course may be prorated to account for any excused work.

5. Scheduled Out-of-Class Activities:

There are no scheduled out of class activities for this course.

6. Course Materials:

The required handouts and readings for this course are available through postings on D2L. Students will be responsible for bringing paper or electronic handouts to class and to keep current with the reading material posted on D2L. It is sufficient to bring an electronic device with a screen large enough to read easily (e.g. a laptop) to each lecture.

ITP Metrics and Top Hat will be used in SCIE 311. These systems involve secure web-based tools for team peer evaluations and collecting in-class responses, respectively. These tools are free to all students and are not dependent on prior access.

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
Webcam/Camera (built-in or external);
Microphone and speaker (built-in or external), or headset with microphone;
Current antivirus and/or firewall software enabled;
Stable internet connection.

For more information please refer to the UofC ELearning online website.

7. Examination Policy:

tRAT quizzes are closed book and in-class.

Missed RAT quizzes may not be written at a later time.

Students should also read the Calendar, Section G, on Examinations.

8. Approved Mandatory And Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course.

9. Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section E.2 of the University Calendar.

10. Human Studies Statement:

If you agree, your course work may be used for research purposes. Your responses will remain anonymous and confidential. Grouped data (no individual responses) may be used in academic presentations and publications. Participation in such research is voluntary and will not influence grades in this course. Students' signed consent forms will be withheld from instructors until after final grades are submitted. More information will be provided at the time student participation is requested.

See also Section E.5 of the University Calendar.

11. Reappraisal Of Grades:

A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.

a. Term Work: The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within ten business days of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections I.1 and I.2 of the University Calendar.

b. Final Exam: The student shall submit the request to Enrolment Services. See Section I.3 of the University Calendar.

If you are concerned about the comments on your assignment or have questions about the grade you have earned, you should first email the instructor or TA (depending on who marked the assignment). Please note that some assignments have rubrics that do not allow for partial credit, and some work might be graded with reference to previous submissions.

Additional Academic Integrity Information: All work submitted for this class (whether as a draft or for final grading) is held to the strictest standards for intellectual honesty. During the first few weeks of the semester, you will complete an assignment about understanding academic integrity and avoiding plagiarism. You must successfully complete this assignment before any other assignments will be graded. We encourage SCIE 311 students to discuss academic integrity issues surrounding assignments with TAs and instructors.

12. Other Important Information For Students:

a. Mental Health The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when
needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, Mental Health Services Website) and the Campus Mental Health Strategy website (Mental Health).

b. **SU Wellness Services**: For more information, see their website or call 403-210-9355.

c. **Sexual Violence**: The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at 403-220-2208. The complete University of Calgary policy on sexual violence can be viewed here.

d. **Misconduct**: Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional Code of Conduct and promote academic integrity in upholding the University of Calgary’s reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor’s consent; submitting or presenting work as if it were the student’s own work; submitting or presenting work in one course which has also been submitted in another course without the instructor’s permission; borrowing experimental values from others without the instructor’s approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

   Student Handbook on Academic Integrity  
   Student Academic Misconduct Policy and Procedure  
   Faculty of Science Academic Misconduct Process  
   Research Integrity Policy

Additional information is available on the Student Success Centre Academic Integrity page.

e. **Academic Accommodation Policy**:

   It is the student’s responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf

   Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf.

   Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the Request for Academic Accommodation Form and sending it to Dr. Nicole Sandblom by email ntscdirector@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.

f. **Freedom of Information and Privacy**: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see Legal Services website.

g. **Student Union Information**: SU contact, Email SU Science Rep: sciencerep1@su.ucalgary.ca, Student Ombudsman

h. **Surveys**: At the University of Calgary, feedback through the Universal Student Ratings of Instruction (USRI) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. **Copyright of Course Materials**: All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of
student academic or non-academic misconduct, in addition to any other remedies available at law.

FACULTY OF SCIENCE — NATURAL SCIENCES PROGRAM
SCIE 311: WRITING & REVIEWING SCIENTIFIC REPORTS
DETAILED COURSE SYLLABUS in Section 13 of Course Outline

Responsibilities and Expectations

Science 311 is a writing course in the Faculty of Science. Writing papers is both challenging and informative. You will learn to critically and substantially revise your paper rather than simply making grammatical and superficial changes.

We note that successful students tend to:

- Come prepared to participate actively in class activities and tutorials.
- Read all material on D2L.
- Complete all assignments to the best of their ability.
- Submit assignments on time.
- Provide thoughtful, well-organized, and critical suggestions to their peers during the review process.
- Reflect on their TA and peer reviews and incorporate suggestions into their papers.

What can you expect from us?

Most of this syllabus is directed at giving you information about the structure of the course, grading and assignment information and what we (the instructors) expect from you. However, we also recognize that there are certain expectations that we need to meet in order for you to have a positive learning experience in this class.

Specifically, we will:

- Be respectful of all persons in the class and create an environment where all opinions and comments are heard and valued.
- Be available outside of class time to discuss course work or other course concerns.
- Encourage you to be well read.
- Provide you with instructional material that will enable you to excel in this class.
- Develop activities that allow you to build your writing skills.
- Assess all assignments fairly and provide suggestions and comments for improvement.

We are excited about this class and look forward to helping you improve as a writer.

Format and Procedures:

Team-Based Learning:

This class is likely very different in format from others you encounter. In this class, we will be using a Team-Based Learning (TBL) approach. We will practice the approach in Module Zero during the first week of the semester.

In this process, you will spend many classes working in teams applying what you’ve learned from the assigned readings. Teams in TBL are different than the kind of group work you may have done in other classes: the instructor forms the teams (as described below) and you will work together throughout the term to complete course assignments and quizzes; team members also evaluate each other’s contributions to the group throughout the term.

TBL uses short quizzes to make sure you’ve got the basics from the required readings. They’re not ordinary quizzes, though: you take the quizzes both individually and as a team, so the quizzes function as learning tools. Most classes will involve lecturing but almost every class will have time to apply what we’ve learned. You will also spend time individually working on your own writing-in-progress before you submit assignments.

Here are the basics of TBL in SCIE311:

1. We’ll form teams during the first class meeting. It’s an instructor’s job to make the teams as diverse as possible, so you will be divided in teams of about six students based on previous courses, your major/year, writing experience, and other factors that will help us form successful teams.

2. For each major Module in the course, you will be assigned some readings, short videos, and animations; we prepared Reading Guides for all assigned readings to help you focus on the most important points. At the beginning of the Module, you will take an individual quiz (~10 multiple-choice questions) called an “Individual Readiness Assessment Test” (iRAT) to see how well you’ve understood the concepts in the assigned reading. These quizzes will be available on D2L 24 hours before the Module begins. Missed quizzes may not be written at a later time.

3. The lecture after having taken the iRAT, you will take the same quiz with your team. This version is called a “Team Readiness Assessment Test” (tRAT). The whole team earns the same score for the tRAT even if some students are absent.

4. As described in the Course Outline, we will determine your Peer Evaluation Score (PES). Your tRAT, Team Contract, and in-
class responses scores will be multiplied by the PES to determine the final mark for the teamwork component of the course.

**What will you write in SCIE311?**

Our course is designed so that you can think about writing as a process. You will write and submit milestone Assignments leading up to your final paper as Version 3 at the end of the semester: Encountering Academic Integrity, Paper Plan Assignment, Version 1, Version 2. You will give and receive feedback from your peers for these writing assignments. A variety of in-class and in-tutorial activities will support your writing process.

**End-of-Semester Goal: Version 3**

To write a brief, well-supported and documented review paper that provides analysis of on a topic of your choice.

**Context:** Regardless of the type of scientific writing you do, a key skill that you need to develop is identifying related research and discussing and analyzing the results and conclusions of all of the resources you find as a single, connected unit.

- Your reference list should be sorted into three sections titled: **Research Papers, Review Papers, Other Instructor-Approved Sources.** In class, we will help you identify a Question based on your interests and to find additional articles that allow you to answer the question.
- **Readings** and in-class activities will provide more instruction about how to use evidence from the results and discussion sections of these research papers.

You must use at least six **research papers** that together with your other sources span the history of the topic

- Look at the authors in your list; all of your citations should not come from one research group.
- Look at the dates on your list; established facts in the field will be from your *Review Papers* section or your *Other Instructor Approved* section. The evidence in your body should be mostly from more recent work. The actual dates for these papers will be very much dependent on the pace of research in the field you choose to write about; sometimes, papers that are ten years old are fine, but sometimes papers that are less than two years old are outdated!
- Your TA will help critique your list, but don't hesitate to ask your instructor for advice!

Once you have found suitable resources, make notes on the key results and conclusions of the papers making special notes about how the papers fit together and help you to understand the question. In our library sessions, the librarians will teach you how to do a cited reference search, because this strategy will help you to find the more recent literature that you need. There are many paths that your paper can take and remember, a discovery in one area can allow for scientific discoveries in another!

Your paper needs to present a critical analysis of a segment of a body of knowledge. This kind of analysis is essential for all types of scientific writing – most notably introduction and discussion sections of research papers, field reports and literature reviews.

*D2L provides Word templates to complete for all course Assignments.*

*Your Instructor will provide feedback and score your Version 3 using the Scoring Guide available on D2L.*

**Milestone: Paper Plan Assignment**

This milestone assignment will allow you to focus on the important articles and ideas from your information search process and start to build your own interpretation and analysis leading to Version 1. You will critique a sample Plan in lecture. You can review this example and your critique while you are building your own Plan. This kind of planning can help you generate ideas for your writing; consider your interpretations and conclusions from your research thus far in order to identify supporting details and missing pieces. We would like you to be flexible as you work on your Plan and start writing your Version 1, but you will commit to your overall topic as part of the Approval of Topic process that accompanies this assignment.

**Milestone: Version 1 Assignment**

This milestone assignment will allow you to focus on *writing paragraphs* and including *evidence* from your cited sources in the body of your paper. You will critique a sample of paper body text in lecture. Your TA will provide a review of your Version 1 and your Instructor will provide feedback and score the paragraph that you think is your best! You should change the *colour of the text* for the paragraph you would like to be scored.

**Milestone: Version 2 Assignment**

This milestone assignment will allow you to focus on *flow* and *style* while *revising* your body and writing an Introduction. You will critique an example Introduction in lecture. You may write a cover letter to your TA; your TA will provide a review of your Version 2. Your Instructor will provide feedback and score the body paragraph that you think is your best. You should change the *colour of the text* for the paragraph you would like to be scored.

**Milestone: Version 3 Assignment**
This milestone assignment is your final paper. You will critique a sample Conclusion and two sample Abstracts in lecture. You will write a cover letter to your TA; your TA will provide a review of this cover letter. Your instructor will score the entire paper.

Course Requirements:

1. Class Attendance & Scheduled Tutorial Attendance:
   - **Arrive** at schedule classes and tutorials on time. Late arrivals and early departures can be disruptive and can result in you missing important information. We understand that there are special circumstances when you may have to arrive late or leave early; please make your arrival/departure as unobtrusive as possible and be sure to let your teammates know about your situation in advance of class. **Your team members will determine your PES score depending on your communication with your team.**
   - **Attend** all scheduled classes and tutorials. If you have to miss class, email your Instructor and/or the Course Coordinator ahead of time to find out if alternative arrangements are possible. If you are ill, email your instructor and/or the Course Coordinator as soon as possible and make-up arrangements might be able to be planned. If your email concerns a tutorial session, you should cc to your TA so that s/he knows your situation.

2. Writing Activities:

   Our goals for the activities in this course are all intended to move you forward in your writing and to clarify communication of the course outcomes and how you can meet them! Our plans with the activities are simple; we ask you to work on the assigned exercises in lecture or tutorial time so that your instructor/TA can review your understanding before the class ends.

   **Submissions:**
   - Your tutorial responses will be scored by your TA.
   - Your Reflection Activities will be submitted to D2L Dropboxes and scored by your Instructor.
   - Your in-class responses will be scored by your Instructor.

   **Late or Missing:**
   If you miss a scheduled class or tutorial, you will not be able to participate completely in the writing activities completed in that class or tutorial. Contact the Course Coordinator (see 1. above). Deductions will be made for late or missing submissions not reported. **Your team members will determine your PES score depending on your participation and communication surrounding your participation in team activities.**

   **Peer Reviewing Expectations:**
   Peer review is an important component of this class and research into student learning clearly indicates that student writing improves when at least one peer review step is included before the submission of a final paper. In order for the peer review process to be successful, your work must be completed on time. Depending on the type of peer review, you might not be able to participate if your work is not submitted on time and will forfeit the grades associated with these activities.

3. Assignments (Plan, Version 1, Version 2, Version 3)

   **Submissions:**
   - Each Assignment will be submitted to D2L Dropboxes and scored by your Instructor.
   - You will respond to your TA in a Cover Letter attached to Version 3; a Version 2 Cover Letter might also be required.

   **What happens if you are late for any of these four major assignments?**
   For the four major assignments (the Plan, Version 1, Version 2, Version 3), we aim to balance being fair and reasonable about deadlines. We know that life happens during the semester:

   1. Let us know as soon as you realize you will be late! Your instructor will be able to help you plan the next steps. You might need an excused extension (mental or physical health, emergencies, etc.) and we can plan your subsequent deadlines accordingly.
   2. For these four assignments, you can also use one **48-hour postponement** with no questions asked if you need it. You do need to let your instructor know that you are cashing in on this policy (See Step 1 above).

   *Please come speak with us if you feel like you are about to make a bad decision with respect to your academic integrity.*

4. Re-grading of Assignments

   If you are concerned about the comments on your assignment or have questions about the grade you have earned, you should email the instructor or TA (depending on who marked the assignment). If you think the mark earned is not appropriate, you should write an email letter to the Course Coordinator to present your argument. You must submit this information to the Course Coordinator within 10 business days of the date your mark on this assignment was made available to you via D2L. Please note: The assignment may be re-graded by another individual. The mark may go up or it may stay the same. In our experience with Science 311, the mark typically stays the same.
Science 311 Guidelines for Team Contract

Modified with permission from BIOL435 Course Materials

Rationale

To prepare you for the teamwork in professional school and/or the workforce, you will be assigned a team for the semester. Your team will work together to complete the collaborative team-scored assignments in SCIE 311 this semester.

As you learned from the assigned readings, videos and animations about teams, there are four stages of team development. Writing a team contract can help a team reach the final or performing stage, at which point teams are highly effective. The process of generating a team contract can actually help jump-start a group’s collaborative efforts by immediately focusing the team members on a definite task. The team members must communicate and negotiate in order to identify the quality of work they all wish to achieve, and the level of group participation and individual accountability they all feel comfortable with. A well-formulated team contract helps a team avoid problems that lead to a dysfunctional team and poor-quality work.

Team Contract Activity

There are two major sections to a team contract:

1. identification of expectations
2. specification of the consequences for failing to fulfill these expectations

Since the basic purpose of this team contract is to accelerate your team’s development, to increase individual accountability for team tasks, and to reduce the possibility for team conflict, make your contract as specific as possible; the more specific that you can be about your team expectations and procedures, the greater chance you have for a successful team experience.

- Read the draft Team Contract on the next page. A Word version of the contract will be available on D2L for your team to edit for submission.
- Think about what other ground rules you think are necessary, and how you think your group should deal with failure to follow these ground rules.
- Your team will discuss the contract in designated class time.
- Once you have all agreed on the contract for your team, one team member will upload a signed version to the appropriate D2L Dropbox for approval by your instructor.

What if that your team is not working as well as you had hoped? (Despite the team contract)

This experience is normal but needs to be attended to immediately. Perhaps your team is simply not following the established contract procedures or roles as strictly as you should be, or perhaps you need to change some of the procedures or roles as outlined in your contract. Immediately discuss and resolve the challenges your team is facing; do not delay, as the problems will not go away by themselves. Don’t forget that you can ask your instructor to help your group resolve the conflict so that you will have the most positive team experience possible.

Draft Team Contract Template

Science 311 Team Activity 1: Team Contract

The ground rules for our team are: [add additional rules as discussed by your team]

- Come to all classes and on time
- Come prepared and ready to participate in the team
- Listen actively to what others have to contribute
- Be supportive of the efforts and initiatives of others
- [insert text here]
- [insert text here]
- [insert text here]
Our **asynchronous** communication plan will be:
[using the D2L Discussions, using other technology, etc. insert text here]

Our **class plan for cell phones and device-multitasking** will be:
[only use devices for team communication and team activity, etc. insert text here]

We will **assign roles for each Team Activity** by:
[asking for volunteers, rotating by last name, etc. insert text here]

We agree that the consequences for failing to follow the above ground rules are:
[add additional consequences as discussed by your team]

- If a team member is unable to attend a class, they will notify the team ahead of time.
- If someone on the team is not paying attention during a team RAT or assignment (e.g. not listening; texting or emailing), other team members will point this out and they will immediately give their full attention to the task.
- If someone on the team is being too critical or otherwise unsupportive, other team members will point this out and they will make efforts to watch their words and interactions.

- [insert text here]
- [insert text here]

If the infractions continue, our team will [add plan as discussed by your team]
[insert text here]

Team Members: [decide who will upload the final version and add their name as #1]

a. All team members participated in formulating the standards, roles, and procedures as stated in this contract.
b. All team members indicate that they have read the **Readings in Module 0** regardless of whether they attended RAT 0 and when they registered in SCIE 311.
c. We understand that we are obligated to abide by these terms and conditions.

1) signature ----------------------------------------------------------- date__________
Name: [type name here]

2) signature ----------------------------------------------------------- date__________
Name: [type name here]

3) signature ----------------------------------------------------------- date__________
Name: [type name here]

4) signature ----------------------------------------------------------- date__________
Name: [type name here]

5) signature ----------------------------------------------------------- date__________
Name: [type name here]

6) signature ----------------------------------------------------------- date__________
Name: [type name here]

2022-09-15 10 of 11
Department Approval