

STAT 551 Statistical Consulting Fall 2021

Supervised statistical practice directed toward the solution of current problems posed by subject-area researchers.

Lecture times: MW 14:30-15:50 Pacific time

Session: Fall 2021

Instructor: Vincenzo Coia

Writing Expert: Estella Qi

Office hours: Use Slack for quick discussion; otherwise, use Slack to schedule a meeting with the instructor.

Course platforms: Website <https://github.com/ubc-stat/stat-551>, and Slack #stat-551 private channel.

Prerequisite: Stat 550

Objectives: This course gives students practical experience in consulting and in the application of statistical thinking and techniques to current subject-area research problems. Students will apply the basic skills of consulting, developed in STAT 550, to problems posed by subject-area researchers in response to a widely distributed announcement of STAT 551. Course activities include meeting with clients, formulating approaches to clients' problems, making oral presentations, and writing reports summarizing results and recommendations.

Goals include the following.

- Effectively communicate orally and in writing with non-statisticians so clients understand and can apply your advice.
- Gain practical consulting experience from their clients as well as from other students' clients.
- Get practice in making short presentations and writing short reports that focus on take-home messages.
- Get practice in review and critique of written and oral presentations of peers to learn what are unclear presentation methods.
- Learn statistical terms and methods not seen in graduate courses, and explain them to the class.

Notes:

- Students seeking an exemption from Stat 551 based on previous equivalent coursework or consulting experience must do so at least one month prior to the start of the semester.
- The skills developed in STAT 551 are essential for effective employment as an applied statistician. The skills required to interact effectively with non-statisticians in collaborating on research problems will be valuable no matter what career path you are contemplating.

ASDa will be getting client inquiries. It is expected that around 35 clients can be accommodated over the term. If the class size is large, then many clients will have two consultants.

Course Requirements:

Tentative requirements are the following (with adjustments to be made if we don't get enough clients):

- (a) Three clients in total as consultant, with at least one client as sole consultant. End product of each project is a consulting report in pdf format to be sent to the client and uploaded to github.
- (b) A presentation on a statistical topic that arose in client project.
- (c) Observe a client presentation of your classmate, and write a summary of what occurred.
- (d) At least two peer evaluations of first drafts of client reports.

STAT 551 is graded on a Pass/Fail basis. To earn a Pass, the requirement is that all course work MUST be completed by the end of December 2021. If you become ill, we will follow Department and University regulations on deferrals.

At any time, you might be dealing with up to 3 projects: 2 clients plus a peer evaluation.

Clients are assigned on a first-come, first-served basis. Also, client projects tend to take longer than you think, so plan accordingly, and be prompt.

UBC's Policies and Resources to Support Student Success

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious, spiritual and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here.

Covid Safety in the Classroom

Masks: Masks are **required** for all indoor public spaces on campus, including classrooms, as per the BC Public Health Officer orders and UBC policy. For our in-person meetings in this class, it is important that all of us feel as comfortable as possible engaging in class activities while sharing an indoor space. For the purposes of this order, the term “masks” refers to medical and non-medical masks that cover our noses and mouths. Masks are a primary tool to make it harder for Covid-19 to find a new host. You will need to wear a medical or non-medical mask for the duration of our class meetings, for your own protection, and the safety and comfort of everyone else in the class. You may be asked to remove your mask briefly for an ID check for an exam, but otherwise, your mask should cover your nose and mouth. Please do not eat in class. If you need to drink water/coffee/tea/etc, please keep your mask on between sips. Students who need to request an exemption to the indoor mask mandate must do so based on one of the grounds for exemption detailed in the PHO Order on Face Coverings (COVID-19). Such requests must be made through the Center for Accessibility (info.accessibility@ubc.ca). Mask wearing protects you as well as others in your environment. Let's do everything we can as a community to stop the spread of this virus.

Vaccination: If you have not yet had a chance to get vaccinated against Covid-19, vaccines are available to you, free, and on campus: <http://www.vch.ca/covid-19/covid-19-vaccine>. The higher the rate of vaccination in our community overall, the lower the chance of spreading this virus. You are an important part of the UBC community. Please arrange to get vaccinated if you have not already done so.

Seating in class: To reduce the risk of Covid transmission, please sit in a consistent area of the classroom each day. This will minimize your contacts and will still allow for the pedagogical methods planned for this class to help your learning.

Your personal health

If you're sick, it's important that you stay home – no matter what you think you may be sick with (e.g., cold, flu, other).

- A daily self-health assessment is required before attending campus. Every day, before coming to class, complete the self-assessment for Covid symptoms using this tool: <https://bc.thrive.health/covid19/en>
- Do not come to class if you have Covid symptoms, have recently tested positive for Covid, or are required to quarantine. You can check this website to find out if you should self-isolate or self-monitor: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/self-isolation#Who>.
- Your precautions will help reduce risk and keep everyone safer. In this class, the marking scheme is intended to provide flexibility so that you can prioritize your health and still be able to succeed.

If you do miss class because of illness:

- Consult the class resources on the course website.
- Use Slack to carry out discussions.

For additional information about academic concessions, see the UBC policy here: <http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0>

Instructor health

If I (the instructor) am sick: If I am ill, develop Covid symptoms, or test positive for Covid, then I will not come to class. If that happens, here's what you can expect:

- If I am well enough to teach (most likely), I will conduct virtual lectures through Zoom until I am well. If this happens, you will be tagged in an announcement via Slack with information. You can anticipate that this would very likely be a last minute announcement. Our classroom will still be available for you to sit and attend an online session, although it is recommended that you bring headphones.
- If I am not well enough to teach, it is possible that one or more teaching assistants will take my place. But if not, we will either try to make up for lost time, make new resources to aid in your learning, or make accommodations regarding the assignments.