

CLIMATE EMERGENCY (GEOG 202)

*NOTE: 2022-23 is the first offering of this course. This syllabus is a draft and will be updated closer to the start date of the course.

ACKNOWLEDGEMENT

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the xwməθkwəy̓ əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

COURSE INFORMATION

Course Title	Course Code Number	Credit Value
Climate Emergency	GEOG 202	3.0

PREREQUISITES + COREQUISITES

Second year standing is a prerequisite. There are no specific prerequisite or corequisite courses. Students from all backgrounds are encouraged to enrol.

INSTRUCTIONAL TEAM

Course Instructors	Contact Details	Office Location	Office Hours
[Course Instructor]			TBA
[Teaching Assistant]			TBA

COURSE DESCRIPTION

We are in a climate emergency. Imagining and enacting a just and sustainable future requires an understanding of what makes up the emergency, the challenge it presents and the set of strategies that already exist to address it. This course takes a critical approach to examining the state of scientific knowledge about the climate emergency and the policy challenges and pathways it presents. We will engage in topics such as impacts and associated emissions scenarios; the development of global climate change agreements; the challenge of decarbonization and how this transition must be shaped by equitable, socially just outcomes; the role of the courts and legal strategies in achieving climate mitigation and climate justice, and more. The course will draw on current state of knowledge and policy on key issues and will feature a series of guest speakers with expertise in relevant topics. The course is interdisciplinary, addressing elements of, and interactions among, climate science (e.g., impacts of 1.5 degree temperature rise), social science, and policy (e.g., mitigation, adaptation).

Beyond being a source of knowledge about the climate emergency this course actively teaches climate action. There will be opportunities to develop skills, engage with organizations in the climate community and hear from leaders. This course prepares students to be hopeful, positive agents of change in their communities and the larger climate movement.

LEARNING OUTCOMES

1. Identify the various impacts of climate change on human and natural systems and represent these impacts in ways that centre the lived experience of those affected.
2. Evaluate and critically engage with key concepts in the climate emergency, such as 1.5 degrees, net zero, climate debt, mitigation, decarbonization, and adaptation.
3. Analyze progress towards the Paris Agreement and the 1.5 degree target, taking an evidence-based position on actions that accelerate equitable decarbonization and energy transitions in a specific jurisdiction (local, regional, national or global).
4. Identify and effectively communicate some of the technical, economic, cultural and socio-political opportunities and challenges associated with achieving decarbonization.
5. Use key historical precedents for rapid social and economic transformations in the face of collective emergencies to interpret the climate emergency.
6. Compare and contrast approaches to climate solutions in relation to their potential for decarbonization, energy transitions, equity and justice.
7. Identify credible sources of evidence and analysis and produce persuasive, evidence-based rhetoric.
8. Identify, reflect on and assess climate action activities

COURSE STRUCTURE AND LEARNING ACTIVITIES

Class time will be structured around short lectures, discussions, breakout group activities, and talks by guest speakers. There will be two synchronous class days.

- Day 1: The first weekly class will include short lessons by the 1st Instructor introducing weekly topics and background concepts, along with discussions about readings and, occasionally, short group activities to engage with real-world examples.
- Day 2: The 2nd day will extend or apply the weekly material and typically include short lectures by local experts or by the 2nd Instructor, along with reflection activities.

There may be a few lessons with online, asynchronous materials (short, 10 minute, video lessons or interactive webpage activities) provided to substitute for or, in some cases, to prepare for or complement the 1st weekly class, but the majority (80%) of lessons will be delivered in person.

Readings are available online through the library at the link [TBA] or linked to Canvas weekly modules (see Learning Materials and Schedule of Topics, below). Lesson outlines (slides or summaries) will be provided in Canvas, typically after the class for which they are scheduled. Readings should generally be completed in advance of the weekly classes (day 1). If there is an activity or assessment (reflection, discussion) that requires a reading to be completed in advance of a class, it will be announced within a week of that class. Participation in weekly group activities and synchronous lessons is required.

ASSESSMENTS OF LEARNING

See end of document for example grading rubric.

1. **Climate Action and Reflection (10% course grade)** Due Friday Week 9 via online submission
 - Choose a climate action to participate in (e.g. behaviour change, talking with friends/family about climate issues, joining a group or organization, participating in collective action) and write a short reflection. Assessment will be based on how well students connect their climate action to course goals and the climate emergency, including how well they justify their choice of climate action and explain how it might lead to individual and/or collective action and awareness.
 - The climate action should occur by week 8 in time to submit by the due date in Week 9.
 - o Main Learning Goals addressed: # 1 and 8 in “Learning Outcomes”, above.

2. **Technical Content Quizzes and Assignments (15% course grade)** Due every 2nd week by the Day 1 class
Six short online reflections and/or quizzes designed to engage students in more technical concepts and reports. Focused on conceptual understandings of key graphs, terms and concepts. Reflections will be in the form of a short paragraph or so that addresses reading questions. The reflections and/or quizzes will run weekly to bi-weekly and will be in the form of short multiple choice and/or short answer questions that address weekly readings, topics or other assigned material.
 - o Main Learning Goals addressed: # 1, 2, 3
3. **Country Profile (30% course grade)** Due Fridays of Week 5 (profile); Week 7 (letter)
 - Prepare a country profile assessing progress towards the Paris Agreement, drawing from credible sources, and identify two concrete proposals to accelerate action. This will be in the form of a written report of about 5-6 pages, typed (1.5 spaces or equivalent). See rubric (20% course grade).
 - Write a letter to a relevant political actor such as a Prime Minister/President (political leader), a Minister of Environment, Group of Seven leader, etc, as appropriate, advocating a specific action based on research for country profile. The assessment will be based on the quality of written expression, the strength of the arguments and their evidence-base used to justify the recommended policies or actions. See rubric (10% course grade)
 - o Main Learning Goals addressed: # 2-4, 6-8
4. **Critical Analysis of Climate Action Strategies (15% course grade)** Due in Friday, Weeks 9 & 11
 - Write two x 500 word responses to climate action strategies proposed in weeks 7-11 of the course, drawing from at least two sources that include credible evidence. The assessment will be based on the degree to which the reflection engages with the climate action, addresses the sources used and the quality of the analysis and written expression.
 - o Main Learning Goals addressed: # 4, 5, 6, 7
5. **Final Exam (30%)**
 - Open book exam at the end of the term. The exam will include short answer and discussion or short essay questions that address course themes.
 - o Main Learning Goals addressed: # 1, 2, 3, 4, 5, 6, 7

LEARNING MATERIALS

There is no textbook for this course. Instead, the course uses a diverse set of resources as the supporting material. These include journal articles, news articles, podcasts, reports and films. The list of resources is broken down by week and in the Schedule of Topics (below).

SCHEDULE OF TOPICS

The course is organized by three major questions:

1. What is the emergency?
2. How far have we come; how far do we need to go?
3. How can we get there?

Under these guiding questions, weeks are organized by topics.

Note: The following is a tentative schedule of topics and readings. Minor adjustments to the schedule will be announced in lecture and posted in Canvas. Students should check the schedule in Canvas periodically.

Week	Topics	Description, readings, assignments and activities
Part 1. What is the emergency?		
W1	Course introduction	<p>Readings</p> <ul style="list-style-type: none"> • UBC Climate Emergency declaration • Callison, C. 2021. What COVID-19 and climate change teach us about “syndemics.” <i>Policy Options</i>. Available at: https://policyoptions.irpp.org/magazines/march-2021/what-covid-19-and-climate-change-teach-us-about-syndemics/
W2	Why is it an emergency?	<p><i>Introduction to UNFCCC (particularly Article II and concept of “dangerous anthropogenic interferences”), brief history of two temperature targets and their relationship to science and politics, summary of projected impacts of beyond 1.5 degree temperature change.</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Kuyper, J, Schroeder, H. & Linnér, B.-O. 2018. “The Evolution of the UNFCCC”, <i>Annual Review of Environment and Resources</i> 43: 343–368. doi: 10.1146/annurev-environ-102017-030119 • United Nations Climate Change. What is the Paris Agreement? Available at: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement • Masson-Delmotte, V et al. 2018. Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. <i>World Meteorological Organization, Geneva, Switzerland, 32 pp.</i> Available at: https://www.ipcc.ch/sr15/chapter/spm/ • IPCC, 2018: <i>Global Warming of 1.5°C. An IPCC Special Report</i>. In Press. Available at: https://www.ipcc.ch/sr15/ • Roberts, D. 2020. The sad truth about our boldest climate target. <i>Vox</i>. Available at: https://www.vox.com/energy-and-environment/2020/1/3/21045263/climate-change-1-5-degrees-celsius-target-ipcc
W3	Responsibility & climate justice	<p><i>This week introduces “common but differentiated responsibilities” and climate debt debates, finance for developing world, and nationally-determined contributions.</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Matthews, D. 2016. Quantifying historical carbon and climate debts among nations. <i>Nature Climate Change</i> 6: 60-64. doi: 10.1038/nclimate2774 • Hickel, J. 2020. Quantifying national responsibility for climate breakdown: an equality-based attribution approach for carbon dioxide emissions in excess of the planetary boundary. <i>The Lancet Planetary Health</i> 4(9): e399-e404. doi: 10.1016/S2542-5196(20)30196-0
Part 2. How far have we come; how far do we need to go?		

W4	<p>What progress has been made? And not made.</p>	<p><i>This week assesses progress on emissions and finance in relation to the Paris Agreement and considers the role of concentrated wealth and power impeding climate action.</i></p> <p>Readings</p> <ul style="list-style-type: none"> ● Production Gap 2020. Available at: https://productiongap.org/2020report/ ● Anderson, K. et al 2019. A factor of two: how the mitigation plans of ‘climate progressive’ nations fall far short of Paris-compliant pathways. <i>Climate Policy</i> 20(10): 1290-1304. Available at: https://www.tandfonline.com/doi/full/10.1080/14693062.2020.1728209 <ul style="list-style-type: none"> ○ Media summary: Anderson, K & Stoddard, I. 2020. Beyond a climate of comfortable ignorance. <i>The Ecologist</i>. Available at: https://theecologist.org/2020/jun/08/beyond-climate-comfortable-ignorance ● Oxfam, 2020. Climate Finance Shadow Report: assessing progress towards the \$100 billion commitment. <i>UNFCC</i>. Available at https://policy-practice.oxfam.org/resources/climate-finance-shadow-report-2020-assessing-progress-towards-the-100-billion-c-621066/ ● [Watch] Film. <i>Merchants of Doubt</i>. <p>Activities</p> <ul style="list-style-type: none"> ● Skill workshop in collaboration with UBC library: identifying credible sources (for Country Profile)
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Part 3. How can we get there?

W5	<p>Pathways to decarbonization</p>	<p><i>This week introduces sources of emissions (electricity, transportation, heating/cooling) and presents different pathways to reaching 1.5 degree target, including concepts like negative emissions, net zero).</i></p> <p>Readings</p> <ul style="list-style-type: none"> ● Energy & Climate Intelligence Unit. 2018. Net Zero: Why is it necessary? Available at: https://eciu.net/analysis/briefings/net-zero/net-zero-why ● IEA. 2021. <i>Net Zero by 2050</i>. Available at: https://www.iea.org/reports/net-zero-by-2050 (excerpts) ● Lee, M. 2021. Dangerous Distractions. <i>Canadian Centre for Policy Alternatives</i>. Available at: https://www.policyalternatives.ca/net-zero ● Energy & Climate Intelligence Unit. 2018. Negative emissions: why, what, how? Available at: https://eciu.net/analysis/briefings/net-zero/negative-emissions-why-what-how ● Carton, W. et al. 2020. Negative emissions and the long history of carbon removal. <i>Wires Climate Change</i>. Available at: https://doi.org/10.1002/wcc.671 ● Táíwò, O. and H.J. Buck. 2019. Capturing carbon to fight climate change is dividing environmentalists. <i>The Conversation</i>. Available at: https://theconversation.com/capturing-carbon-to-fight-climate-change-is-dividing-environmentalists-110142
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W6	Climate action 101	<p><i>This week introduces debates over the individual and collective action; students will participate in a climate action fair that brings together organizations, initiatives from all over campus.</i></p> <p>Readings</p> <ul style="list-style-type: none"> • [Listen]: Johnson, E. and A. Blum. 2021. Is your carbon footprint bullshit? [Audio Podcast Episode] In <i>How to Save a Planet</i>. Gimlet. Available at https://gimletmedia.com/shows/howtosaveaplanet/xjh53gn/is-your-carbon-%20footprint-bs • Maniates, M. 2014. Individualization: plant a tree, buy a bike, save the world? In Nicholson and Wapner (eds.) <i>Global Environmental Politics: From person to planet</i>. Routledge. P. 269-279.
W7	Regulating our way to net zero	<p><i>This week will introduce concepts of policy and regulation to students, examine Canadian/BC/Vancouver climate policy and consider barriers to stronger policy, as well as the settler colonial context.</i></p> <p>Readings</p> <ul style="list-style-type: none"> • Aronoff, K. 2021. <i>Overheated</i>. Bold Type Books. Excerpt • Graham, N. et al. 2020. Carbon Capital's political reach: a network analysis of federal lobbying by the fossil fuel industry from Harper to Trudeau. <i>Canadian Political Science Review</i> 14(1): 1-31. • Stokes, L. 2020. <i>Short circuiting policy</i>. Oxford UP. Excerpt • Indigenous Climate Action. 2021. Decolonizing climate policy in Canada. Available at: https://static1.squarespace.com/static/5e8e4b5ae8628564ab4bc44c/t/6061cb5926611066ba64a953/1617021791071/pcf_critique_FINAL.pdf (excerpt)
W8	Pricing our way to 1.5 degrees?	<p>Readings</p> <ul style="list-style-type: none"> • Parry, I. 2019. What Is a Carbon Tax? <i>Finance and Development</i>, June: 54–55. Available at: https://www.imf.org/external/pubs/ft/fandd/2019/06/pdf/what-is-carbon-taxation-basics.pdf • Carattini, S. et al. 2019. How to win public support for a global carbon tax. <i>Nature</i> 565: 289-291. Available at: https://www.nature.com/articles/d41586-019-00124-x • Green, J. 2021. Does carbon pricing reduce emissions? A review of ex-Post analyses. <i>Environmental Research Letters</i> 16(4): 1-17. doi: 10.1088/1748-9326/abdae9/meta • Green, J. 2021. Beyond Carbon Pricing: Tax Reform is Climate Policy, <i>Global Policy</i> 12: 372-379. doi: 10.1111/1758-5899.12920

W9	The courts? Legal strategies	<p>Readings</p> <ul style="list-style-type: none"> ● United Nations Environment Programme (2020). Global Climate Litigation Report: 2020 Status Review. Nairobi. Available at: https://www.unep.org/resources/report/global-climate-litigation-report-2020-status-review <ul style="list-style-type: none"> ○ Introduction (p. 3-10), and “Key trends” (p. 14) ● Boffey, D. 2021. Court orders Royal Dutch Shell to cut carbon emissions by 45% by 2030. <i>The Guardian</i>. Available at: https://www.theguardian.com/business/2021/may/26/court-orders-royal-dutch-shell-to-cut-carbon-emissions-by-45-by-2030 ● Morton, A. 2021. Australian court finds government has duty to protect young people from climate crisis. <i>The Guardian</i>. Available at: https://www.theguardian.com/australia-news/2021/may/27/australian-court-finds-government-has-duty-to-protect-young-people-from-climate-crisis <ul style="list-style-type: none"> ○ The latter two articles document pivotal, recent court decisions that highlight the role of the courts in driving policy changes, brought forth by the public/environmental groups.
W10	Supply-side restrictions/ policy	<p>Readings</p> <ul style="list-style-type: none"> ● Fossil Fuel Non Proliferation Treaty: A global initiative to phase out fossil fuels and support a just transition. Available at: https://fossilfuel treaty.org/ ● Asheim, G. B. <i>et al.</i> 2019. The case for a supply-side climate treaty. <i>Science</i> 365(6451), 325–327. doi: 10.1126/science.aax5011 ● Le Billon, P. and B. Kristoffersen. 2019. Just cuts for fossil fuels? Supply-side carbon constraints and energy transition. <i>Environment and Planning A: Economy and Space</i> 52: 1072-1092, doi: 10.1177/0308518X18816702 ● Bauer, N, McGlade, C, Hilaire, J, <i>et al.</i> 2018. Divestment prevails over the green paradox when anticipating strong future climate policies. <i>Nature Climate Change</i> 8(2): 130–1. doi: 10.1038/s41558-017-0053-1 ● McKibben, B. 2012. Global Warming’s Terrifying New Math. <i>The Rolling Stone</i> July 19. Available at https://www.rollingstone.com/politics/politics-news/global-warmings-terrifying-new-math-188550/
W11	Green New Deal: what’s the deal	<p>Readings</p> <ul style="list-style-type: none"> ● Friedman, L. 2019. What is the Green New Deal? <i>New York Times</i> 21 Feb. Available at: https://www.nytimes.com/2019/02/21/climate/green-new-deal-questions-answers.html <ul style="list-style-type: none"> ○ Text of House Resolution, A Green New Deal, US Congress (5 February 2019) https://www.congress.gov/bill/116th-congress/house-resolution/109/text ● Economist. 2019. A bold new plan to tackle climate change ignores economic orthodoxy. <i>The Economist</i> Feb 7. Available in pdf or https://www.economist.com/finance-and-economics/2019/02/07/a-bold-new-plan-to-tackle-climate-change-ignores-economic-orthodoxy

		<ul style="list-style-type: none"> • Mann, M. 2019. Radical reform and the Green New Deal. <i>Nature</i> 573: 340-346. Available through UBC library: https://courses.library.ubc.ca/i.xqFbmp Links to an external site. • Alder, B. 2019. The Green New Deal isn't big enough. <i>Washington Post</i> 2 May. Available at: https://www.washingtonpost.com/news/posteverything/wp/2019/05/02/feature/the-green-new-deal-isnt-too-big-its-not-nearly-big-enough/ • Estes, N. 2019. A red deal. <i>Jacobin</i> 8 June. Available at: https://www.jacobinmag.com/2019/08/red-deal-green-new-deal-ecosocialism-decolonization-indigenous-resistance-environment • Mastini, R. et al. 2021. A Green New Deal without growth? <i>Ecological Economics</i> 179: 106832. doi: 10.1016/j.ecolecon.2020.106832 • Táiwò, O. 2019. The Green New Deal and the Danger of Climate Colonialism. <i>Slate</i> March 1. Available at: https://slate.com/technology/2019/03/green-new-deal-climate-colonialism-energy-land.html?via=recirc_recent
W12	Direct Action	Readings <ul style="list-style-type: none"> • Klein, N. 2014. Blockadia: the new climate warriors, Chapter 9 in <i>This changes everything: Capitalism vs. Climate</i>. Random House, Toronto, pp. 293-336. • Manuel, K. 2020. Epilogue in <i>Botherhood to Nationhood</i>. Between the lines press. • Temper, L. et al. 2020. Movements shaping climate futures: A systematic mapping of protests against fossil fuel and low-carbon energy projects. <i>Environmental Research Letters</i> 15: 123004. doi: 10.1088/1748-9326/abc197
W13	Living with the trouble and imagining the future	Readings <ul style="list-style-type: none"> • Klein, S. 2020. <i>A Good War: Mobilizing Canada for the Climate Emergency</i>. ECW Press. Excerpt Activities <ul style="list-style-type: none"> • UBC Climate Hub session - climate action and well-being at UBC.

UNIVERSITY POLICIES

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 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 on [the UBC Senate website](#).

ACADEMIC INTEGRITY

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what your work is. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidents of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the [Discipline for Academic Misconduct](#) section of the UBC Academic Calendar.

ACADEMIC ACCOMMODATIONS

Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with the [Centre for Accessibility](#). The Centre will determine that student's eligibility for accommodations in accordance with [Policy 73: Academic Accommodation for Students with Disabilities](#). Academic accommodations are not determined by your instructors, and instructors should not ask you about the nature of your disability or ongoing medical condition, or request copies of your disability documentation. However, your instructor may consult with the Centre for Accessibility should the accommodations affect the essential learning

ACADEMIC CONCESSION

If you miss marked coursework (assignment, exam, presentation, participation in class) and are an Arts student, review the Faculty of Arts' [academic concession page](#) and then complete Arts Academic Advising's [online academic concession form](#), so that an advisor can evaluate your concession case.

If you are a student in a different Faculty, please consult [your Faculty's webpage on academic concession](#), and then contact the instructor, where appropriate.

Version: Oct 5, 2021

Written Submissions (Country profile; Letter to a Political Actor; Critical Analysis of Climate Strategies [written component])

Overall Quality (points are relative only; depends on the assignment):

4-5	3-4	2-3	2-3	Grade Received
Overall, the structure and quality of the paper were excellent. Grammatically correct. Writing was clear, concise, and meaningful. Proper formatting and paper length.	Overall, the structure and quality of the paper were good. Some grammatical mistakes. Writing was clear and meaningful. Proper formatting and paper length.	Overall, the structure and quality of the paper were sufficient. Some grammatical mistakes. Writing was unclear at times. Proper formatting and paper length.	Poor paper structure. Writing was unclear with poor grammar. Paper did not meet length requirement.	

Introduction (For the Country Profile):

2	1.5	1	0-0.5	Grade Received
Clear statement of intent/objectives with cited context/ background. Clear explanation of why country was selected and how an analysis of its climate situation relates to course content.	Statement of intent/objectives with cited context/ background. Explanation of why country was selected and how an analysis of its climate situation relates to course content.	Objectives/intent stated with little cited context or background. Limited explanation for why country was selected and how an analysis of its climate situation relates to course content.	Objectives, intent not stated or unclear. No rationale given for relevance of country choice to climate problem.	

Body of the Paper/Discussion:

5-6	4-5	3-4	0-2	Grade Received
Points are well- argued and ideas are well organized; Excellent and thoughtful conclusions are justified. Relevant concepts are adequately explained	Points are reasonably well-argued and ideas are organized; Discussion is clear and compelling conclusions are drawn. Relevant concepts are adequately explained	Points are weakly argued and ideas are somewhat organized; Discussion is somewhat clear; conclusions are poorly justified. Needs more attention to relevant concepts	Poor organization and arguments; conclusions not present/ justified. Lack of attention to relevant concepts	

Citations:

3	2	0-1	Grade Received
In-text citations are present and properly formatted. Works-cited is properly formatted using an accepted style (MLA/Chicago, etc).	In-text citations and works cited are present and correct but not everything needing references are cited.	In-text citations and works cited present, but not everything needing references are cited and/or formatting is incorrect.	

Overall:

2-3	1.5-2	0-1	Grade Received
Provided on time; thorough and complete according to specifications	Provided on time; lacks some details	Lacks key details / not provided on time	