

BA580B — The Integrated Global Economy

Course Information

Course Code 2024W1 BA 580B 001/002

Credits 1.5

Instructors Prof. Werner Antweiler

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Office Location Henry Angus Building 275

Office Hours Fridays 09:45-11:15 or by appointment

Class Times see timetable below; note joint lunchtime sessions classroom Location see timetable below; note joint lunchtime sessions

Course Website https://canvas.ubc.ca/

Section 001

| | Week 1 | | Week 2 | | Week 3 | | Week 4 | | Week 5 | |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Time Slot | Mon | Wed | Mon | Wed | Wed | Fri | Mon | Wed | Mon | Wed |
| | Oct.28 | Oct.30 | Nov.4 | Nov.6 | Nov.13 | Nov.15 | Nov.18 | Nov.20 | Nov.25 | Nov.27 |
| 08:00-08:50 | HA 347 | _ | HA 347 | _ | HA 347 |
| 09:00-09:50 | HA 347 |
| 13:00-13:50 | _ | _ | _ | _ | | _ | HA 132 | _ | HA 132 | _ |

Section 002

| | Week 1 | | Week 2 | | Week 3 | | Week 4 | | Week 5 | |
|-------------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|
| Time Slot | Mon | Wed | Mon | Wed | Wed | Fri | Mon | Wed | Mon | Wed |
| | Oct.28 | Oct.30 | Nov.4 | Nov.6 | Nov.13 | Nov.15 | Nov.18 | Nov.20 | Nov.25 | Nov.27 |
| 13:00-13:50 | _ | _ | _ | _ | _ | _ | HA 132 | _ | HA 132 | |
| 16:00-16:50 | HA 337 | HA 337 | HA 337 | HA 337 |
| 17:00-17:50 | HA 337 | —- | HA 337 | _ | HA 337 |

Joint lunchtime sessions will combine both sections for guest speaker events. Because of room capacity requirements, joint sessions will be held in Henry Angus 132. Please take note that Monday November 13 is a civic holiday in lieu of Remembrance Day. Classes are shifted from Mon/Wed to Wed/Fri that week.

Course Description

The world economy is becoming increasingly interdependent as value chains extend across countries and continents, and the volume of international trade and foreign direct investment has grown faster than world economic output. The effects of globalization are complex and have created both opportunities and challenges for businesses. For example, globalization has opened new markets for businesses and has created unprecedented wealth. However, climate change and environmental concerns, as well as political and societal changes brought on by globalization, require businesses to adapt

and better manage risk.

This course is designed to explore the role of businesses in the global context. The major themes covered in this course include international markets, societal trends, sustainability, international politics & institutions, and new technologies & innovation—broadly, the five factors of STEEP Analysis. How can businesses become more resilient when global value chains become increasingly extended and interdependent? How can businesses respond to climate change and related policies? Which disruptive technologies will change the economic landscape in the next decades? Which emerging political and societal trends will influence the integrated global economy?

Placed at the end of the MBA program, this course is intended to be a capstone experience that integrates knowledge from across the entire program and prepares students for the uncertainties and risks of the global economy—always expecting the unexpected, and responding to new challenges with analytic rigour based in sound economic reasoning. To aid in this process, students will be introduced to scenario writing techniques as part of a team project.

Course Format

In-class time will be spent on lectures, guest-speakers, a variety of activities, and discussion. Students will do readings outside of classroom time. There will also be a group-based project to be completed outside of class time.

Learning Objectives

At the end of the course, students will be able to:

- Learn how to apply STEEP (Societal, Technological, Economic, Environmental, Political) Analysis to business scenarios;
- Identify the types of risks inherent in the integrated global economy and apply mitigating strategies through resilience measures;
- Appreciate long-term trends in all STEEP areas and how they can be embraced to ensure the long-term viability of international businesses;
- Learn scenario writing techniques.

Assessments

| Component | Weight | Туре | Deadline* |
|--|--------|------------|--------------|
| Assignment #1 – Scenario Analysis Prospectus | 10% | Individual | Sat, Nov. 2 |
| Assignment #2 – Innovation/Sustainability | 20% | Individual | Thu, Nov. 21 |
| Scenario Writing Team Project | 50% | Teamwork | Fri, Dec. 6 |
| Participation | 20% | Individual | |

^{*} Deadlines are 23:59 of that day.

Participation

It is important to attend all sessions and fully engage in classroom discussions of the pertinent topics. Please keep your class notes up-to-date. In order to prepare for discussions in class, students must read the assigned articles and cases.

Assignment #1

The first assdignment is meant to set students on track to develop ideas for a scenario analysis. The assignment involves writing a two-page "scenario analysis prospectus". The page limit is strict and literally means the front and back of one sheet. Fonts smaller than 10 points are not permitted. The prospectus should pitch an idea for a scenario that a real-world company could face in the next 2-20 years. Your scenario analysis prospectus should identify:

- The company and the company's activity, market, or existence that is at risk
- The scenario as a distinct event or process
- The economic significance of the scenario for the firm [some data]
- The driving forces behind the scenario
- How the firm could possibly react/adapt [bullet points]

I will mark these proposals on three rubrics (a) creativeness and novelty of the scenario [30%]; (b) economic thinking and concepts embedded in the description of the driving forces and their effect on the pathway that could bring a scenario about, and internal coherence of these concepts [40%]; an (c) ability to communicate the ideas effectively [20%]; and (d) presence of suitable/informative references [10%]. While the space is limited, the use of one or two figures, or backing up your key arguments with suitable data in table, is encouraged. Please pick up to three best references that you can find to make the case for your proposed scenario. References should be hyperlinked.

Once teams for the course project have been formed, the graded assignment #1 is meant to help with finding the most suitable and promising ideas. We will also have an opportunity to discuss some of your ideas in class in a session set aside for this purpose: Scenario Writing Clinic (I).

This first prospectus is worth only 10% of the final grade, which is meant to provide an opportunity to experiment and not have too much at stake. Grades will ikely vary widely in this first assignment.

For assignment #1 please do not use natural events/disasters as scenarios (e.g., solar storms, earthquakes, volcanoes). Please explore only scenarios that have STEEP drivers caused by human actions. [This restriction will not apply to the team project.]

Assignment #2

For the second assignments, students will be assigned a topic (or be given a variety of topics to choose from) to discuss in a written report, typically an issue that is un-

der active discussion in the media at the time. The assignment covers innovation and technology, and/or environment and sustainability. The objective of the report is to apply your knowledge to analyze the implications of the issue at hand for businesses and their future prospects, positively or negatively. *THIS IS NOT A SCENARIO ANALY-SIS.* This assignment is meant to fine-tune your ability to apply economic thinking and business logic to emerging challenges across various industries, and explore how these challenges will shape an industry. Note that each topic has two parts, that is, two questions that are outlined and should guide you through the research on the topic. Reports will be graded on five rubrics:

- Ability to draw on business intelligence (data and sources)
- Ability to apply economic/social concepts and reasoning (rigour)
- Exploring all relevant dimensions of the problem/trend (scope)
- Describing suitable strategic responses of businesses (creativity)
- Efficacy of communication & writing (style)

This assignment should be about 3-4 pages long (maximum 2,000 words), not including any tables, figures, or bibliographic citations (as applicable). It should be concise and well-structured. A list of ten suitable (but not exclusive) list of topic ideas will be posted on Canvas. Alternative topics are subject to the instructor's approval.

Given the limited time to review your assignments, I will not be able to provide feedback on all reports. Those that are very strong and compelling need little feedback, but if I find weaknesses in your reports, I will provide comments through Canvas explaining where I saw weaknesses.

Scenario Writing Team Project

A self-directed team project is part of this course. Students are asked to form teams of five students in order to research, prepare, write, and evaluate a business scenario. Team membership is by random assignment, subject to instructor adjustments.

Strategic foresight is a necessary skill in managing businesses in the international environment. 'Scenario analysis' describes a strategic planning method to develop action plans for contingencies in future yet-unknown states of the world. This method has been adapted from military intelligence and often involves simulations of hypothetical states of the world. Strategic foresight is gained by combining information from the five STEEP domains (social, technological, economic, environmental, and political) and understanding how interactions among them can generate different outcomes. The value of scenario analysis lies in going beyond mere extrapolation of current trends and instead focus on disruptive events and contingencies. As is the case in the military, businesses need to be well prepared for eventualities.

In economic analysis, scenario planning often is useful because there is a large range of plausible outcomes and key variables (interest rates, exchange rates) are continuous. By focusing on extreme cases ("best case," "worst case") and an intermediate benchmark case, businesses can envision different outcomes as discrete states, and in par-

ticular safeguard against worst-case outcomes. A particularly useful part of scenario planning is "stress testing" using adverse or worst-case scenarios. For businesses, scenario planning focuses on key elements of strategic management, such as competitive advantage, value chain integration, core competence, and strategic partnerships. At its best, scenario planning can help re-envision a business in a changing landscape with a paradigm shift—for example, oil majors transitioning away from fossil fuels and morphing into broad energy companies.

The core element of every scenario plan is the assumed future state of the world. It should be a distinguishable alternative state of the world and a clear departure from "business as usual." Student teams will be tasked with finding their own topic from among the STEEP themes. However, unlike assignment #1, you may also draw on natural events as scenarios. To provide some examples:

- A major technological breakthrough in battery technology (high energy density)
- U.S. elections in 2024 put an anti-trade populist to the White House
- A war breaks out across the Taiwan Strait
- A tsunami destroys critical shipping infrastructure in Asia
- A category 5 hurricane destroys most refineries along the Gulf of Mexico
- The international financial network (SWIFT) is hacked and incapacitated
- Power systems are disrupted by a geomagnetic storm ("Carrington Event")
- GPS navigation is incapacitated by space debris ("Kessler Syndrome")
- Artificial organs can be grown in labs reliably and cheaply
- Cheap green hydrogen replaces natural gas and oil as energy carrier

The scenario analysis should not exceed 12 pages of text or 7,200 words, but may contain additional appendix material such as charts, figures, tables, and references. You will have to be selective in what you include. Demonstrate that you can apply concepts taught in class and that you can conduct thorough factual research (document your sources in a reference section at the end of the paper). When using information from websites, make sure that you identify authorship, credibility (institutional affiliation) and timeliness of the source along with the URLs.

I will grade the written scenario analysis on seven criteria: (a) **driving forces** that lead to scenario are identified [15%]; (b) majour **outcomes** caused by scenario are well identified [15%]; (c) **sources** are scientific and of high quality [12%]; (d) economic **reasoning** is evident and compelling [16%]; (e) clear priorities or **actions** are identified for decision-maker to take action if/when scenario happens [12%]; (f) compelling **narrative** about the scenario lead-up [15%]; (g) clear, logical, and coherent **structure** and writing [15%]. Scores are assigned on a [0,1,2,3,4] scale to each rubric, with a 2 score considered as good and fully meeting expectations; 0 as unsatisfactory (major weakness), 1 as not fully meeting expectations (some weakness), 3 as very good, and 4 as excellent (outstanding understanding of the subject matter). Raw scores are weighted and added, and the total scare is scaled up to determine a final grade.

Learning Materials

Recommended books and articles about scenario writing:

- Rafael Ramirez and Angela Wilkinson: "Strategic Reframing: The Oxford Scenario Planning Approach," Oxford University Press, 2018.
- Woody Wade: "Scenario Planning: A field guide to the future," Wiley, 2012.
- The Economist: "Why it's worth reading crazy-sounding scenarios about the future," July 6, 2019. The Economist magazine has a collection of "What if?" articles, which inspired the thinking behind this course. Some recent (2021) additions are:
 - What if smartphones became personal health assistants?
 - What if everyone's nutrition was personalized?
 - What if biohackers injected themselves with mRNA?
 - What if a deadly heatwave hit India?

Newspaper and magazine articles are assigned as required readings prior to specific classes. They are made available through Canvas:

- Innovation. We will explore innovations associated with the energy transition and will focus on (a) Clean energy's next trillion-dollar business, *The Economist*, 1 Sep 2024; and (b) A variety of new batteries are coming to power EVs, *The Economist*, 28 Feb 2024. For those who want to dive deeper into the topica, there are two insightful books. Matt Ridley: "How Innovation Works: And Why It Flourishes in Freedom," Harper, 2020. Clayton Christensen: "The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail." Harvard Business Review Press, 2016.
- Sustainability & Environment. We will look at mining of critical minerals around the world as examples of the multi-dimensionality of the challenges that business face. We will explore two articles about two different minerals: (a) Jack Ewing: How a Quebec Lithium Mine May Help Make Electric Cars Affordable, *The New York Times*, 20 September 2022; and (b) Dionne Searcey, Michael Forsythe, and Eric Lipton: A Power Struggle Over Cobalt Rattles the Clean Energy Revolution, *The New York Times*, 20 November 2021. And (c), we will also explore an important new carbon policy from the European Union: Böhringer et al.: Potential impacts and challenges of border carbon adjustments, *Nature Climate Change*, Jan 2022.
- International Trade & Politics. We first focus on the new age of industrial policy and reshoring/friend-shoring with the article (a) Warnings from history for a new era of industrial policy, *The Economist*, 11 Jan 2023. Next we explore the pivotal trade relationship between China and the US, and the trajectory of the Chinese economy: (a) Aaron L. Friedberg: Stopping the Next China Shock, *Foreign Affairs* 103(5), Sep/Oct 2024, pp. 177-189; (b) Zongyuan Zoe Liu: China's Real Economic Crisis, *Foreign Affairs* 103(5), Sep/Oct 2024, pp. 160-176
- Society. In our last block we explore the role of social movements and how businesses respond: (a) Daniel Korschun and N. Craig Smith: "Companies Can't Avoid Politics And Shouldn't Try To". *Harvard Business Review*, March 2018; (b) 'CEO activism in America is risky business", *The Economist*, April 14, 2021. We will also discuss the economics and politics of immigration.

Course-Specific Policies and Resources

Missed or late assignments, and regrading of assessments

Late submissions will not be accepted and will receive a grade of zero.

No Distribution of Recordings

There are no audio or video recordings of classes, and there is no distribution of recordings of classes. Students are not permitted to record a class without the explicit permission of the instructor. Permission to record a class will only be granted as part of an academic concession. Any recording that is permitted must not be distributed to any third parties. Classes are designed as and are intended to be in-person. Your attendance is expected. If you are unable to attend, the policy regarding missed classes described in this syllabus applies. It is your responsibility to ensure that you have the materials you need for missed classes.

Academic Concessions

If you experience unanticipated events or other circumstances that constitute valid grounds for academic concession as defined by UBC's Academic Concession Policy, complete and submit the Academic Concession Request & Declaration Form. Concessions are time-sensitive and the online form should be submitted within 48 hours of the missed deadline. Upon submission, your request will be recorded in the RHL and you will also receive an email with further instructions. Please read this email carefully and be sure to also refer to the relevant course syllabus for each concession that you have requested. Please know that you should continue to work on the coursework for the course(s) which you submitted a concession for. You should anticipate being asked to submit work or write an exam as soon as the circumstances affecting your ability to fulfil your academic responsibilities are resolved.

When an academic concession is granted, the following applies: if a student misses the first assignment, the weight from this assignment shifts to the second assignment; if a student misses the second assignment, it can be turned in later at a revised date to be determined jointly by the instructor and the RHL Office; and if a student is unable to participate in the team project, an arrangement will be made for a remedial individual project in lieu of the team project (worth 30%) combined with an oral examination (worth 20%), at a time and place to be determined jointly by the instructor and the RHL Office.

Attendance

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment. Stu-

dents missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on the transcript.

Punctuality

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

Electronic Devices

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students? use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

Citation Style

Please use the American Psychological Association (APA) reference style to cite your sources. Details of the above policies and other RHL Policies are available at: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625

Use of Artificial Intelligence

Any work submitted must be your own original work, written without outside assistance or collaboration. Any use of generative artificial intelligence (AI), including ChatGPT, is not permitted and constitutes academic misconduct. Any student suspected of submitting work that includes AI generated content may be asked for preliminary work or other materials to evidence the student's original and unaided authorship. The student may also be asked to separately explain or support their work. AI identification methods may also be employed by the instructor. After review, if it is determined by the instructor that submitted work likely contains AI generated content, the work may receive a zero and may be subject to further misconduct measures set out in the UBC Academic Calendar.

Team Work Assessment

Students participating in team work are expected to: contribute equally to the assigned project(s); allocate the workload across team members through consensus and cooperation; and provide 'best effort' to reach the assigned workload targets. Generally, team grades are the same for all team members. If two or more team members assess another

student's contribution as substantially insufficient, they should contact the instructor(s) immediately at the first sign of problems so that the instructors may intervene and help rectify the situation. However, if a pattern of 'free riding' is persistent, students should take notes of meetings, attendance at meetings, and specific contributions to the project from each team members, and submit this information to the instructors. The instructors reserve the right to review relative team contributions and interview or survey team members. If there is sufficient evidence of differential contributions, the instructors reserve the right to assign individual grades to team members instead of a team grade.

University Policies and Resources

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 at https://senate.ubc.ca/policies-resources-support-student-success.

Respect for Equity, Diversity, and Inclusion

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Metis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well-served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

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 is your work. 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, incidences of plagia-

rism 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.

Copyright

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Any lecture recordings are for the sole use of the instructor and students enrolled in the class. In no case may the lecture recording or part of the recording be used by students for any other purpose, either personal or commercial. Further, audio or video recording of classes are not permitted without the prior consent of the instructor. Students may not share class Zoom links or invite others who are not registered to view sessions.

Acknowledgement

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the Musqueam ($x^w m \partial \theta k^w \partial \phi m$) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site. Find out more about UBC's commitment to Indigenous engagement through UBC's Indigenous Portal.

Course Schedule

This course schedule is subject to change with class consultation.

For assigned [READINGS] please refer to the section "Learning Materials" above, and watch for announcements in class and on Canvas.

| Date | Topics | | | | |
|--|--|--|--|--|--|
| Week 1: Scenario Analysis & The Future | | | | | |
| Mon, Oct. 28 | Introduction to the course | | | | |
| | Basics of scenario analysis; Practicing scenario writing | | | | |
| Wed, Oct. 30 | Economic Drivers of Future Technologies | | | | |
| | International Risk Management: When/How Things Go Wrong | | | | |
| | Week 2: Innovation | | | | |
| Mon, Nov. 4 | Energy Transition Technologies: Batteries [READINGS] | | | | |
| | Scenario Analysis Clinic (I): Examples | | | | |
| Wed, Nov. 6 | Innovation: Artificial Intelligence | | | | |
| | U.S. Election Results: Canada/US Relations | | | | |
| | Week 3: Trade Policy | | | | |
| Wed, Nov. 13 | China and United Statess [READINGS] | | | | |
| | U.S. Election Results: Global Trade | | | | |
| Fri, Nov. 15 | Trade Policy and Trade Wars | | | | |
| | Close-up: EV Tariffs & the Future of Car Manufacturing | | | | |
| | Week 4: Sustainability | | | | |
| Mon, Nov. 18 | Carbon policies & International Trade [READINGS] | | | | |
| | Guest Lecture: Nuclear Fusion and the Future of the Energy Transition; | | | | |
| | Speaker: Dr. Michel Laberge, Founder & Chief Science Officer, General Fusion | | | | |
| Wed, Nov. 20 | Climate Change & The Global Energy Transition | | | | |
| | Critical Minerals Mining [READINGS] | | | | |
| | Week 5: Society | | | | |
| Mon, Nov. 25 | Social Movements, Migration, and Businesses | | | | |
| | Guest Lecture: Emerging Hydrogen Markets and Technologies; | | | | |
| | Speaker: Gary Schubak, Chief Commercial Officer, Ekona Power | | | | |
| Wed, Nov. 27 | Scenario Analysis Clinic (II): Pitfalls | | | | |
| | Module conclusion | | | | |

Sustainable Development Goals

At UBC Sauder, we are committed to responsible business practices that can have transformative impacts on society. One of the ways we are reinforcing our commitment to responsible business is by showcasing relevant content in our courses via the lens of the United Nations Sustainable Development Goals. In this course, we will touch on topics that relate to the following goals:

| SDG | Description of how and when the goal is covered in the course |
|---|---|
| 7 AFFORDABLE AND CLEAN ENERGY | The transition to renewable energies and the electrification of mobility are explored in week 4. New markets related to clean energy a central theme in this course. |
| 8 DECENT WORK AND ECONOMIC GROWTH | Economic Growth and innovation are discussed throughout the course, in particular, with innovation a special focus in weeks 1 and 2. We discuss how businesses can make their growth sustainable. |
| 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | Industry innovation is a central theme of this course that pervades all weeks, but is a focal point in week 2. We explore future technologies and supporting infrastructure, also in scenario anlayses. |
| 10 REDUCED INEQUALITIES | Economic inequality is discussed in the context of the environmental consequences of businesses activities, in particular in case studies focusing on responsible mining and global repercussions of organic farming in weeks 2 and 3. |
| 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | Responsible consumption and production are central themes in 'The Integrated Global Economy'. We focus on sustainability and 'green consumer' themes in week 4, and in particular on manufacturing and recycling of EV batteries. |
| 13 climate action | Discussions of climate action take place during week 4. We focus particularly on carbon policies in the global context, and repercussions through international trade. |
| 17 PARTNERSHIPS FOR THE GOALS | International cooperation is explored in week 3 where the focus is on international trade, the future of globalization, and international repercussions of business activities. We also address international conflict and risk management in the global context. |