ECO372: APPLIED ECONOMETRICS, WINTER 2025
DEPT. OF ECONOMICS, UNIVERSITY OF TORONTO
C. J. WARD, PHD

1 COURSE DESCRIPTION

Overview:

ECO372 Data Analysis and Applied Econometrics in Practice is an intermediate level course in econometrics, which equips students with a modern approach to data analysis and econometrics, focusing on the use of data to answer causal questions. Students will learn about different empirical techniques that economists use to do so: random assignment, linear regression, difference-in-differences, and regression discontinuity design. Students will learn about applications of these techniques in academic research. Econometric methods will be illustrated using the application of regressions to a wide variety of economic questions and data sources, including the use of statistical software.

Reference materials: Required readings will be assigned each week, supplementing the weekly lecture video and lecture notes. Throughout the course we will draw from two books, listed under "Required Books" below. One of these, Mastering 'Metrics, is accessible through UofT libraries and available for purchase in the UofT Bookstore or elsewhere. The other, Causal Inference: The Mixtape, is freely available online. Other readings will be posted on our website on our weekly content page. You may also find it useful to consult other econometrics or statistics books. This is especially useful if you are already familiar with these books through other courses (i.e., this will help you build a bridge from your previous courses to our course material).

Required Textbook:

- Mastering 'Metrics by Joshua Angrist and Jörn-Steffen Pischke (Princeton University Press, ISBN:978-0-691-15284-4)
- Causal Inference: The Mixtape by Scott Cunningham (https://mixtape.scunning.com/)

Other References (not required):

- Introduction to Econometrics, 4th Edition by James H. Stock and Mark W. Watson.
- Introductory Econometrics: A Modern Approach, 7th Edition by Jeffrey M. Wooldridge.
- Quantitative Social Science: An Introduction in Stata by Kosuke Imai and Lori D. Bougher
- 2020 Business Statistics, Fourth Canadian Edition by Sharpe, De Veaux, Velleman, and Wright

Software: Throughout our course we will learn to use statistical software in lectures and tutorials. This will provide lots of practice using software, which you will apply to your own project submissions. Specifically, we will use the software, Stata, which is one of the easiest statistical packages to gain quick proficiency in basic data and regression analysis. We do this because the process of "applying econometrics" can be daunting, and so we will simplify the *logistics* of doing analysis by using the same common language across all elements of the

course and within the course community. *Can you use another program?* No. There is value in "speaking the same language" in our course activities, whatever that language may be. Stata is the primary statistical package supported by the instructor and TAs and will be used by your classmates. While it is technically possible to use another software program, you would need to be proficient enough to translate Stata references/tasks directly into another package all the while staying in time with course activities, and you would need to translate all of your analytical code back into Stata for submission on the course project. Remember also, that many students in the course will have no background in any statistical package, so by setting out as a beginner Stata user, you are not starting out behind but rather adding another program to the list of software to which you've become familiar.

An ECO372 Stata licence will be provided to you as part of the course.

2 COURSE LOGISTICS:

Course website: https://q.utoronto.ca/courses/381924

Course email: eco372.ward@utoronto.ca

Student hours: multiple times per week; see Quercus for times and locations (listed under Quick Links)

Course schedule: ECO372 has a scheduled meeting time of Fridays 9am-11am, and section meeting times of Thursdays 9am-11am (section L0101), 11am-1pm (section L0201), and 1pm-3pm (section L0301). We assume students are available each week on both Friday and Thursday at the times given for their section on the university timetable, and we expect weekly attendance in each scheduled course meeting on Thursday and Friday as the course involves participation-based work within our course time slots.

Communication: Most points of communication for the course (lecture, tutorial student hours, help desk, email) are detailed through the course website (address given above). We coordinate course help, project support, and student hours to course timeslots to avoid other scheduling conflicts and to streamline discussions about course content. We also offer open student hours outside course time slots on other days of the week. Please see the Course website for details on how best to communicate with course staff depending on your type of inquiry.

Preparation and Prerequisites: ECO372 is a 3rd-year course on Data Analysis and Applied Econometrics in Practice, which builds directly on second-year prerequisites, particularly ECO220Y1 (Introduction to Data Analysis and Applied Econometrics) or its equivalents ECO227Y1/ (STA237H1, STA238H1)/ (STA247H1, STA248H1)/ (STA257H1, STA261H1). Our starting point will assume mastery of prerequisite material, and we will spend the first weeks of the course bringing your accrued second-year statistical knowledge to the practice of applied econometrics. The rest of the course, then builds on that knowledge with the subsequent, more advanced course topics. It is your responsibility to bring sufficient comprehension of prerequisite material, and it is the responsibility of our course to build on that baseline. We view prerequisites not only as a thing you did that one time, but as necessary preparation for ECO372. The full set of prerequisites for ECO372 are listed and described here: https://artsci.calendar.utoronto.ca/course/eco372h1. Note: the department checks whether students

have the correct course prerequisites and will automatically remove those who have not fulfilled the requirements.

3 WEEKLY SCHEDULE

Our course structure in a typical week begins with readings and reference content (required), and it ends with interactive course meetings and assessment activities, which integrate the week's knowledge and assesses your understanding.

If you like active class work, course discussion, and working with peers, this course is for you!

Weekly details will be announced and posted ahead of time on the weekly calendar on Quercus according to date. As noted in Section 1, you should expect to be available for all four hours of course time each week (this ensures that you are ready to attend all weekly participation components and guarantees that you have no conflicts in reaching out for help during meeting times. Note also that the above provides an example of a *typical* week, which will occur with modification around midterm dates, assessment components, and unforeseen events.

3.1 COURSE MEETINGS (THURSDAY/FRIDAY)

Course meetings are live and delivered in-person. Please prepare ahead of time by reviewing the week's lecture material, which will make it significantly easier for you to engage with the live course content (and with the rest of the ECO372 community).

During the classroom period, you will want to ensure you have some way to access our Quercus site for course materials (via wifi with, preferably, a laptop), and you will also need some way to take notes (electronic annotation, paper and pencil, or alternative). Taking notes will be particularly important since not all information is contained on the posted lecture slides. You can take notes any way you prefer, e.g., you can do it on physical paper referencing slide numbers …or you can do it electronically directly on posted lecture slides, etc. You get the idea here: taking notes is important, and you need to find a way to do it.

Access to Stata during lectures is recommended since lectures often include live Stata examples (and since the course meetings are an opportunity to check in with me or classmates on code issues you may be up against). An alternative to having direct access to Stata during the lecture is to share with a neighbour, take notes on process, and then replicate the exercises in Stata later on your own computer.

Is there an incentive to go to class? Aside from the participation grade? Yes, my friends, because this is where you will see targeted activities and discussion helping you to complete the essay and data analytics work and example applications similar to invigilated tests. You will not have access to this discussion unless you attend.

3.2 KEEPING UP A WEEKLY PRACTICE

Keeping a regular practice of course skills is particularly important in ECO372 as the content builds on itself, and your mastery of it depends heavily on spaced repetition. To this end, our econometric training schedule will involve a weekly practice of study, application and reflection, which we then use as the basis for the next week's training. There is a cadence here, where each

week adds to last week's progress, and we build our understanding by using our weekly training regime: study, apply, reflect. Just as you would not expect to run a successful marathon by leaving all training to the night before the race, you cannot expect success in this course by leaving all course work to the night before due dates. To put an even finer point on it, if you do not prepare yourself with weekly readings and resources, you will be at a significant disadvantage in completing the weekly activities and participation components. This accumulated deficit will, in turn, handicap your performance in larger course components like the final course project and test.

3.3 Meeting Participation

Aside from expecting you to prepare each week, we also expect your weekly attendance and participation in course meetings (i.e., lectures and tutorials). While we provide online access to course materials (lecture slides, code files, data sets, and reference materials), these materials are an ingredient to (not a substitute for) your active participation in weekly meetings. Moreover, weekly meetings provide specific context for the material and are productive to completing the course assessments. The lectures, for example, include group activities, which have direct application to your submitted course work, and the weekly tutorials develop skills that ready you for the AIM assessments and tests. Several of these course meetings will also include assessment of active participation on your part (see the Evaluation section below). Do not get in the habit of missing weekly meetings.

4 Checklist of Requirements for Course Delivery

Start-up tasks:

- **Check** you have course prerequisites: https://artsci.calendar.utoronto.ca/course/eco372h1
- **Register** on ACORN in both course sessions: your preferred section on Thursday and the course meeting on Friday: https://www.acorn.utoronto.ca/
- **Review** your methods prerequisites by digging up your textbook/course notes and jogging your memory of the main topics covered therein. The methods prerequisite is ECO220Y1 (Introduction to Data Analysis and Applied Econometrics) or its equivalents ECO227Y1/ (STA237H1, STA238H1)/ (STA247H1, STA248H1)/ (STA257H1, STA261H1).
- **Read** the introductory message and **complete** the course Start-up tasks on Quercus: https://q.utoronto.ca/courses/381924/pages/course-introduction-2

For in-person meetings, you will need:

- **Paper and a pencil** (and probably an eraser, unless you're the kind of person that never makes mistakes). Electronic equivalents will work as well.
- Access to a **reliable laptop** with wifi capabilities and ability to access a web browser and our Quercus materials. You will need to bring this laptop to lecture and tutorial time slots (be they in-person or online). See Weekly Details section for details.

- An **installation of Stata** on your laptop, which can be accessed during course time slots (be they in-person or online). See Course Description section for details.
- The **course textbook**. See Course Description section for details.
- A current **installation of Office 365**, available at no cost to current U of T students, via the page Office 365 ProPlus: https://uthrprod.service-now.com/infocomm?id=kb_article&sys_id=514599cf47d011d0c36312c2e36d4378
- Your **TCard** (your U of T Student ID card) ready
- If you have an accessibility concern, reach out to ATS for accommodation as soon as possible so that we can get to work on things right away. To do this visit http://www.studentlife.utoronto.ca and register with Accommodated Testing Services (ATS): https://studentlife.utoronto.ca/department/accessibility-services/

FOR ONLINE MEETINGS:

- Regular access to a **reliable laptop** with a working microphone and webcam
- A **Zoom account under your U of T credentials** (personal Zoom accounts are blocked from accessing U of T zoom sessions).
- Regular access to **reliable high-speed internet** and **reliable electricity**
- The **hardware, software, and knowledge to scan your work to be uploaded**. Most phones can scan (a separate scanner is unnecessary) to create PDF, JPG, or PNG files.

BEST PRACTICES:

- Regularly follow our **Quercus site for detailed guidance**, updated as our situation evolves.
- Be **proactive to avoid technical and other difficulties**, which includes submitting well before deadlines, maintaining your devices, keeping software up to date, minimizing the strains on your internet bandwidth, learning how to scan efficiently, carefully reading all assessment instructions, and contacting your instructor/TAs immediately with any problems.

5 COURSE COVERAGE

Topic*		Reference
Intro:	Introduction to the Practice of Econometrics	Intro Chapter; notes; videos
Bridging:	Bridging from 2nd Year	2yr Pre-req Chapter Review**
Topic 1:	Causality & Statistics	MM Ch 1; MT Ch 4; readings; notes; videos
Topic 2:	Random Assignment	MM Ch 1; readings; notes; videos
Topic 3:	Regression	MM Ch 2; SW Ch's; readings; notes; videos
Topic 4:	Difference-in-differences	MM Ch 5; readings; notes; videos
Topic 5	Regression Discontinuity Design (RDD)	MM Ch 4; readings; notes; videos
Topic 6:	Instrumental Variables (if time allows)	MM Ch 3; readings; notes; videos
Recap:	Conclude and Recap	

*Note: topics may be covered in less than or more than a week depending on our pace as we move through the course.

** Review your methods prerequisites: ECO220Y1 or its equivalents ECO227Y1/ (STA237H1, STA238H1)/ (STA247H1, STA248H1)/ (STA257H1, STA261H1). You can do this by reviewing your prior textbook and course notes to jog your memory of the main topics covered therein.

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Intro:	Introduction to the Practice of Econometrics	Intro Chapter; notes; videos
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Topic 5	Regression Discontinuity Design (RDD)	MM Ch 4; readings; notes; videos
Recap:	Conclude and Recap	

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6 COURSE ASSESSMENT

6.1 EVALUATION

The overall course grade in ECO372 will be determined as follows:

Due Date	Assessment: Name/Format	Weight	Collaboration
Week 1- 11	Active Participation in Meetings Thursdays and Fridays	6	In class
Week 2 on Jan 17	Empirical Economics in Practice Test	3	None
Week 5-6 by Feb 12 on Feb 14	AIM Project 1 Essay and Analytics Work (take-home) Module Test	33	Limited
Week 8-9 by Mar 12 on Mar 14	AIM Project 2 Essay and Analytics Work (take-home) Module Test	33	Limited
Week 12 on Apr 4	AIM Comprehensive (in class) Comprehensive Test	25	None

Active Participation: this course takes teamwork, and teamwork is one of our learning goals. We expect attendance and participation in each scheduled course meeting on Thursday and Friday. Throughout the semester, we assign grades based on active participation and submission of classroom based activities, which make up most of the participation grade. See section on Participation below and the course calendar for details.

AIM Project Structure: there are two project based Analytics and Interpretation Modules (AIM), which integrate with the weekly posted material and course meetings. They require online project submission (take-home essay and analytics work) and in class assessment activities. The take-home and in-class components carry grade shares at 1/5th and 4/5ths, respectively.

AIM Project: Each AIM project follows a guided process over two weeks ending in a comprehensive module test and post assessment debrief. We allow students to submit work at any time in the two week module period. The debrief design and collaborative capstone activities do not allow for late submissions.

Collaboration: AIM Assessments include collaborative and independent work. Limited discussion/interaction regarding certain assessments components is allowed within the narrow parameters described below. As we note there, some elements of the AIMs are closed book with no collaboration allowed.

6.2 Participation and Weekly Assessment

Active Participation:

Participation is multidimensional and reflects an overall assessment of your productive engagement in all aspects of our course. Your regular lecture participation on Thursday and Friday is a significant component, i.e., asking or answering questions during lecture time, answering polls, and/or via other activities. Other opportunities may also count for participation, such as surveys, lecture activities, and/or other activities announced on Quercus.

Any negative participation may result in an overall mark of zero for participation. This would include, but is not limited to, any behaviors that run contrary to the expectations of this syllabus (e.g., seeming to engage in unreasonable collaboration, skipping work, etc.), failing to follow instructions, and any disruptive behaviors affecting your peers or the course team. This type of participation is a rarity, but obviously this isn't the kind of participation we mean when we say "active participation".

Participation is not intended as easy marks. It requires *classroom attendance* in course meetings and participation in scheduled classroom activities, with submission of those activities while there. Submitted classroom activities vary each week: they may include short poll questions throughout the meeting or one large activity taking up most of the time. The aim with these activities is not to evaluate *performance* but instead to help build understanding and break down any misconceptions in the moment (i.e., formative work without the pressure of being graded for correctness). In this vein, some activities may provisioned in real time based on current classroom discussion. You can expect anywhere from 0 to 4 participation submissions per meeting period.

Grades in the A range on this course component are assigned for "Excellent" participation, meaning consistent attendance and thoughtful classroom work submitted throughout the full term. It would seem obvious that a mark of "excellent" is not warranted in cases where attendance is spotty and/or very little effort is given to the classroom work. Therefore, you should not expect a participation mark of 80 or higher unless your participation is consistently excellent throughout our course. For reference, participation grades in the F and D range usually occur when there is no/little measurable indication of your presence in the course.

All classroom activities provide you a record of your submissions, which you can collect and use for review when studying for tests *and* to track your participation throughout term. Each course meeting with submitted classroom activities will contribute to the participation mark with equal weight (this does not include course meetings with tests, which will go towards the test grades as outlined in Section 6.1). You will learn your participation mark after the course is complete and we post final grades.

Participation in Analytics and Interpretation Modules (AIMs):

There are two AIM projects throughout the course, and they are based on the weekly course content (readings, postings and lecture recordings). Each AIM will target general empirical interpretative skills and a specific causal inference topic and application. They require both a preparatory work in the classroom activities, an online take-home submission, and in class assessment. The take-home submission will include submission of your code files, analysis, and critical essay, and the in-class activities will assess your recall and comprehension of the causal inference topics. Here, preparation based on weekly course content is paramount to doing well, and your submitted work will be graded for correctness.

6.3 COLLABORATION

Tests: This may seem obvious, but warrants saying anyway: there is absolutely no collaboration allowed on tests. Your submissions must be entirely your own work, and any collaboration (with

any person or AI bot technology) for any portion is a serious infraction. Note that this means you may not post any material directly related to the tests, discuss any of the test content, or share any files related to the tests **before or during the test window**. After the testing date, discussion of test materials within the context of the course is permissible (and welcome, even), but note that test materials are protected by copyright and cannot be shared or posted outside the context of our course environment (i.e., our course environment is the Quercus page, course meetings, and student hours). To be clear, this means you DO NOT have permission to share these materials outside the course environment. Do not expect detailed test questions and solutions to be posted after the fact in an easily sharable form. Instead, expect a mapping of test questions to course concepts, and actual test questions to be discussed as a group in class time (the latter of which you can relate back to personalized feedback on your test paper itself).

AIM Assessments:

The AIM assessments vary in structure according to the week's topic. The *online submission component* will include submission of your code files and analysis, and for this you are able to engage in reasonable collaboration for aspects of the activity. In this case, this collaboration should take place through course infrastructure: e.g., in the classroom or through our course student hours. Other collaboration outside the course such as sharing files, copying text OR code (written by human OR bot), and/or submitting text OR code that is not your own (written by human OR bot) is prohibited. The work you submit for this assignment must be your own and may not include any content from generative artificial intelligence (AI) tools, either verbatim or with edits. You may, however, use generative AI to support your work in the online component in the following ways:

- To answer general questions about high-level concepts covered in this course or assignment
- To provide examples of the usage of the library's API
- To summarize information as part of the formative process, but where output is not directly submitted as your own work.
- To generate test cases for your code
- To assist with understanding and debugging errors.

Please note that any uses of generative AI beyond the ones listed above are not permitted, and will be considered use of an unauthorized aid, which is an academic offense.

For the *in-class activities component*, no collaboration is allowed, and the policy given above for "Tests" applies here.

Note: submission of your assignments within Quercus, will engage the University's plagiarism detection tool. Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

6.4 Request to review a marking error

Sometimes our marking technologies and processes will assign a mark in error. In these cases, you may request a review. There are two requirements:

(1) The request must be submitted to the **"Marking Error" form**, which is an MS Form posted on the top of the main course website. All questions on the MS Form must be completed. We do not review marking errors that are not described and submitted through the MS Form (e.g., those discussed with TAs in student hours or described through email, but not submitted in the form).

(2) The request must be submitted **within two weeks** of the work's return to the class. Marking TAs will review submissions together at the conclusion of the two-week window. TA hours for this process are assigned and scheduled via DDAH contract, which is why we can't enforce TA work on late submissions.

Before you submit a request, please make sure you understand each element of the assessment itself. You can do this by attending the follow-up review sessions (delivered in class after the assessment), reviewing the provided grading rubric, and checking your understanding with course staff in student hours. Do not submit a marking error if you haven't first spent time to fully understand the question and answer for each element of the assessment. The Marking Error request form is not the correct place to request explanations about assessment content itself.

For each submitted request, the assessment will be reviewed for error; errors will be corrected regardless of direction (up or down). Note that if no marking error is found, we will refer you to the follow-up review sessions, the grading rubrics provided, and student hours for clarification. A regrade request on the part of student that lacks any actual marking error indicates a misunderstanding of the content itself. The remedy here is not a regrade process, but instead to help you come to a better understanding about the content. This is better accomplished by asking the question in class or student hours (e.g., why is my answer wrong? how does this compare to an A+ response?).

All submitted requests are reviewed together after the two-week deadline, not immediately. We will not consider any marking error requests after the deadline.

6.5 Missed Work

Missed work will be graded as a blank submission, and the corresponding mark will be zero. This is because the course work is not complete, and this is the appropriate assessment in this case (e.g., compare this to student submissions where work has been prepared and submitted).

In exceptional circumstances, we may offer accommodation for missed work; the details for each assessment component are outlined below. Regardless of the circumstances, note that there are limits to the overall degree of missed work in the course. This is not about adjudicating the legitimacy of the circumstance, but rather, it is about whether we have collected enough evidence within the duration of the course to judge the course as completed. Indeed, usually it is completely understandable and reasonable that these circumstances affect completion of the course work. The limits on overall missed work, however, are not dependent on our subjective view of the legitimacy of the circumstance, but on an objective assessment that course learning goals are satisfied based on the course content and evaluation (content and evaluation which is constrained by the nature of the course and its role in the larger program).

Note that we unfailingly apply the rules laid out in this syllabus, and we do so consistently across all students according to policies set out here and by UofT more generally. We do this because ad hoc adjustment is entirely unfair to students who may be in similar circumstances, but who do not ask for accommodation beyond what is already offered.

For any student facing extreme circumstances (one's that extend beyond our course, or last multiple weeks), please contact your College Registrar immediately. This will allow you to get going on a coordinated accommodation plan, which also integrates with your other academic responsibilities this term.

Below we outline a list of assessment specific accommodations, which apply to all special circumstances affecting assessment completion, e.g., illness, injury, personal/family problems, enrolling after the course has begun, religious reasons, extracurricular conflicts, technology problems, internet or power outages, quarantine issues, accessibility accommodations, and/or other challenging situations.

6.5.1 MISSED COURSE MEETINGS WITH PARTICIPATION ACTIVITIES

Late entry accommodation for Week 1 and 2: We understand that travel plans and course choices may extend into the first weeks of January, and we post content and introductory information to help you catch-up with the course remotely. We also accommodate students who cannot attend grade-required course meetings in Week 1 by allowing online submission of Week 1 activities up to the end of Week 3 of the course (i.e., by Sunday, January 26 at 11:59pm). After this date, any missing submission will receive a grade of zero. We accommodate students who cannot attend grade-required course meetings in Week 2 by scheduling an in-person make-up option, given in Week 3. By Week 3, we have already completed 25% of the term, and we move quickly in terms of content, which you may want to consider in your late entry plans.

Missed participation-based course meetings after Week 2: After Week 2, participation in the weekly course meetings (Thursday and Friday) is required most weeks throughout the course, and we do not reteach or recreate the classroom activities for student who miss the meeting. Our expectation is for students to attend all course meetings.

Sometimes, for unexpected reasons, students are not able to attend and participate in class (e.g., for special circumstances as listed above). To accommodate students who cannot complete up to two course meetings where submitted participation activities occur, we drop the worst two of these marks in computing the participation grade. These are any two such meetings in Weeks 3-12.

The intention in offering the accommodation is not that it be used strategically to drop any particular course meeting or activity (i.e., we assume you will attend all course meetings and try your best each time), but rather to accommodate unexpected and unforeseen challenges in attending class. Again, if you have unexpected and unforeseen challenges extending beyond our course, or lasting more than a week, you MUST contact your College Registrar immediately before any further accommodation plan can be made.

6.5.2 MISSED AIM MODULE TEST

Spaced out over the term, there are four weeks of integrated AIM module evaluation, which ends in an invigilated module test (see Section 6.1 or the course calendar for details). Any missed module test will receive a grade of a zero, but in exceptional circumstances, we may allow a student to make-up this missed material. For this to apply, you need to complete the following within 1-week of the missed module test:

- Complete "Missed Test," which is an MS Form for our course. All questions in the MS form are required.
- Declare your absence through the University's Absence Declaration form on ACORN.

Records of both these submissions are provided through the submission window, and you should keep records of both submissions. We will not confirm receipt of these on our end (you already have confirmation for both, after all). We will consult these records at the end of the course when calculating grades, and we will reweight the missed module test weight to the other course components in the following way: 60% will be replaced by the AIM comprehensive test, and 40% will be replaced by the other AIM module test.

This policy accommodates students who attend under difficult circumstances and/or miss a test due to technology, travel and/or other issues. The intention in offering the accommodation is not that it be used strategically (i.e., we assume you will attend all meetings and try your best each time), but rather to accommodate unexpected and unforeseen challenges in attending the course meeting. Note that this applies only to the module test weight and does not apply to the Essay and Analytics part of any of the two AIM modules, which are take-home and can be worked on and submitted at any point in the two-week module period. Again, if you have unexpected and unforeseen challenges extending beyond our course, or lasting more than a week, you MUST contact your College Registrar immediately.

Limits to the level of missed work: the missed test accommodation described here **does not apply** if you miss more than one of the AIM module tests. In this case, one missed module test would be reweighted as above and the zero would stand for the second module test. The AIM modules (essay, data work, interpretation, analytics comprehension) are core to ECO372 learning goals, and missing both of the modules means that evaluation is no longer faithful to the training that these assessments represent. There are no circumstances under which we reweight both AIM module tests to other components in order to stand in for the module components. This is because the AIM modules require integrated data work, coding, essay and testing, and each deal with very different causal inference topics and data analytics methods.

In the case where there are extreme challenges to completing the course such that the AIM assessments are missed, starting fresh on the course in the next term might be a good strategic move. This is because when two modules are missed, performance on remaining assessments would need to be at the A+ level to make a marginally passing grade. Given performance at that high a level, it is ideal to take the course again and achieve this grade on all course components by demonstrating this level performance across all causal inference topics.

6.5.3 MISSED AIM COMPREHENSIVE TEST

A missed AIM comprehensive will receive a grade of a zero. In exceptional circumstances, we may allow a student to make-up this missed material. We will invite you to complete the following steps within 1-week of the missed test, all of which need to be complete in order to make-up the grade from a missed AIM comprehensive.

- Complete "Missed Test," which is an MS Form for our course. All questions in the MS form are required.
- Declare your absence through the University's Absence Declaration form on ACORN.
- Check your U of T e-mail. We will coordinate a make-up time, and we will email the time and location of this make-up via email. You need to attend and complete the make-up assessment. There is no make-up for the make-up. Note: disregarding an e-mail from us is not an acceptable excuse for your failure to follow any time-sensitive or other instructions.

The style and timing of the make-up is at our discretion respecting the learning goals of the course, e.g., it may be an individual oral test scheduled one-on-one with me or course staff, a written test scheduled in a joint session with other students, or a combination of both.

The timing of the make-up will be determined by rooming availability, invigilator availability and the academic schedule of the set of students writing the make-up test. Our department staff will provide options to avoid direct conflicts with course meetings or final exams. We limit scheduling dates to those within the winter academic term (April 11th to 30th), and we will not consider other conflicts aside from your existing courses or final exam times (e.g., we do not consider travel plans).

Your performance on the make-up and other course work, as well your MS Form submission and correspondence, will be taken under advisement, and conjointly determine, your final course grade. We do not report marks for make-ups. However, after all regular course work is complete and returned, we will report the mark assigned for the original missed assessment.

6.5.4 Late policy for AIM take-home component

Each AIM module runs for 2 weeks. During this time there is a take-home assignment that may be submitted at any time during the module period. In the first week of the module, there is a workshop with guided activities on the take-home assignment, which helps you prepare your submission. This is often a good point to submit work, although you can delay submission until the next week all the way up to two nights before the module testing component (which is based on this very same take-home assessment). This process-based approach, integrated with activities in our course meetings during the module period, helps you manage your time leading up to deadlines and means on-time submission is a simple matter of sequence. The module concludes in the second week with a session comprised of a comprehensive module test, collaborative capstone activity, and post assessment debrief. Because of this we adhere strictly to deadlines and expect you to submit early or on time. There is a short grace-period of 2-hours after the submission deadlines, but beyond that we do not accept late submissions (no exceptions). A grade of zero is assigned automatically. Answers are taken up directly, and there are no make-ups and no extensions for ANY reason.

7 Course Communication

7.1 Mainstream Communication

This is a challenging course, and you will likely have many questions throughout. We welcome these questions. In fact, we are banking on it. We have designed our course with communication in mind. To facilitate our collective discourse, we have organized the following as part of our semester: weekly course meetings, weekly student hours, and interactive activities requiring your feedback. All told, we have 8 hours of meeting time and 2 hours of student hours each week, and we welcome you to join us here. Your ECO372 community is here for you through our course meetings: each week, all semester. Please consult our course calendar for times, locations, and other contact details. Lastly, please note that we will make important announcements through Quercus, which means you need to check in here regularly. You may also wish to customize your Quercus notification preferences to receive immediate notification of course messages.

As you can probably tell from the Sections above, this course requires a high level of in-person participation, and given how many resources we've put to in-person supports, we will direct ALL communication through these points. Maybe you want to try to by-pass the course infrastructure

altogether and email us one-on-one. Please note, however, that asking questions via e-mail is almost never the best way to get an answer. It leaves others out of valuable discussions and, more generally, requires a lot of repetitive effort for us; effort better put towards course improvement (pareto improvement, even). **We generally do not reply to e-mail, especially about course content**. Instead, consider the avenues of communication listed below, and choose one that best fits your inquiry. If you somehow missed this section of the syllabus the first time around and email me about something of general interest to others or something that has a structured process already attached to it, please do not take offence if you receive a canned reply directing you to come to our course meetings.

1. Questions on course content (including the material covered in course assessments):
    - The primary way to address questions on course content is to bring them to our course meetings. There are course meetings every Thursday (8 hours), and Friday (2 hours). These meetings include structured group work and discussion. On key weeks we convert the Thursday hours into informal "Student Hours" where you can receive extra help as a small group or one-on-one with one of our course staff. These meetings are designed to be interactive, and we welcome questions here!
2. Questions about Stata specifically:
    - Some questions about Stata may not be sufficiently addressed in course meetings. In this case, attend the "Student Hours" and ask your question there. Remember, we also have structured course meetings scheduled throughout the semester to walk you through the basic mechanics of Stata.
3. Technological issues:
    - If you are having an issue with your technology, come to class and discuss with one of the course staff. Remember from Section 4 above; you should be proactive about avoiding technical and other difficulties, which includes learning to use the technology laid out in Section 4 ahead of “crunch” time. Let us help you ahead of time by bringing it to our attention in our Thursday or Friday meetings.
4. For “Marking Error” review requests on course assessments OR inquiries reporting a missed test:
    - Please use the MS forms links on Quercus and read the protocols in Section 6 of the course syllabus.
5. For other inquiries:
    - Consult the course syllabus or course notes for information on your inquiry.
    - Come to Student Hours. Consult the Quick Links table on the Quercus Course Calendar for locations and times, and the weekly calendar postings for weeks where we add additional support.
    - Ask us in class during any of the Q&A breaks.

Note, I love talking with students. Moreover, our ECO372 TAs are chosen specifically because they have the same preference to help and share their understanding of the material with you. Do not feel that you are encroaching on our time by coming to ask questions (personally, I consider these hours the best part of my week!).

7.2 EMAIL POLICY

In ECO372 we rarely engage in back-and-forth communication through electronic means. This is because classroom interaction and open attendance student hours are a more efficient, effective and collaborative way to answer questions and communicate in real time for a course of this size.

We organize a high level of in person supports to support this communication, which means that most questions can be handled through points 1-5 above.

Email is reserved for rare concerns (e.g., about accessibility accommodations, TA issues, typos or broken links on the website). If you need to send an email, please adhere to the following:

- Send your email to the course email: eco372.ward@utoronto.ca. Do not use any other email address to get in contact with us (it will be missed or ignored).
  - For example, do not try to email us through Quercus or at any other address the instructor/TA may hold. We do not receive Quercus inquires and TAs are not scheduled/compensated for any additional time put toward email responses.
- Send the email from your UofT email address (it will be ignored as spam otherwise).
- Include your student number in your signature.
- Please include the nature of your inquiry

What if you don't get an email reply?

This likely means that we are expecting you come to the next course meeting and follow-up with your question. The design of the course means you probably don't have an email that needs an immediate, on-call response (i.e., please see section **6.5 Missed Work** for policy on last minute submission emergencies and adhere to **Section 3.3 Keeping up a Weekly Practice** and **Section 3.4 Meeting Participation** to stay on top of content questions ahead of course due dates). Note that for the reasons outlined above, we will not reply to questions that are better addressed face-to-face in course meetings, student hours, through points 1-5 above, or where the answers are already communicated in the Syllabus or course announcements. Therefore, if you don't receive a reply, please check the syllabus, review Quercus announcements, see your TA or me during student hours.

8 Academic Integrity

Please read/refamiliarize yourself with the Faculty Arts & Science's Statement on Academic Integrity at the start of our course: https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity. As part of an academic community, it is your responsibility to be aware of appropriate conduct. Any academic offence will be reported and acted upon immediately. All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me during class time or student hours. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources (for example, the University of Toronto website on Academic Integrity).

9 Recording Technology

This course, including your participation, will be recorded on video in OCCS-ready classrooms and may be available for viewing remotely in some circumstances (e.g., see Student Accessibility section below). Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor. For questions about the recording and use of videos in which you appear, please contact your instructor.

10 Student Accessibility

We aim for our course to be accessible to all! If you have a concern, feel free to seek help at any time from us, your College Registrar, and/or the Academic Success Centre. For any issues that last more than a week and extend beyond our course, please contact your College Registrar directly. This will allow us to get going on a coordinated accommodation plan for this course, which also integrates with your other academic responsibilities this term.

The University also provides Accessibility Services through ACE. To learn more visit http://www.studentlife.utoronto.ca/as or go to Accommodated Testing Services (ATS) here: https://www.ace.utoronto.ca/ats/. This will allow us to provide accommodations for assessments as directed by Accessibility Officer. The Course Calendar on Quercus (and Section 6.1 here) lists the deadlines for our course and will give a sense of our schedule and deliverables. If it is helpful, we offer flexibility on the deadlines for Week 1 and 2 participation activities by offering alternatives scheduled in Week 3 of the course. If you are more comfortable writing with ATS, we can coordinate this for our tests. We can also adjust online due dates according to an LOA. Please review Section 6.1 for a list of online submissions and corresponding dates. Note we are bound by the LOA issued by Accessibility Services in all cases.

11 Privacy

We are all expected to respect university privacy and copyright restrictions in this course.

Synchronous Events: The relevant policy states "Students may not create recordings of weekly synchronous events with the exception of those students requiring an accommodation for a disability, who should speak to the instructor prior to beginning to record these events."

Course Recordings: The relevant policy states "Download and re-use is prohibited. Course videos and materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor. Non-compliance with these terms violates an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary actions under the Code of Student Conduct."

Course Materials (lecture slides, tests and assignment questions and other course content): The relevant policy states: "Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor. Non-compliance with these terms violates an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary actions under the Code of Student Conduct."