



**DEPARTMENT OF
EARTH & ATMOSPHERIC SCIENCES**

Teaching Guide

Original Document: John Waldron (2005)

Editorial updates: Robert Luth (2008, 2009, 2010, 2011, 2012)

Editorial updates: Murray Gingras (2013, 2014, 2015, 2017)

Editorial updates: Tara McGee (2018, 2019)

Editorial updates: Judith Enarson (2014)

Editorial updates: Melissa Dhillon (2015, 2018, 2019)

Editorial updates: Sarah Rees (2023)

© Department of Earth and Atmospheric Sciences, University of Alberta

Revision 11/2023

Introduction: What is this document about?

This document is intended to accompany our 'Orientation for new teaching staff' session which is held at the beginning of the fall and winter term for new instructors. The session and this document are intended to help you to prepare for teaching a course in EAS. This Teaching Guide explains programs in EAS, and provides practical guidance for instructors before and during the term, teaching resources, complaints and the things that can go wrong. The topics covered in this Teaching Guide are very practical 'nuts-and-bolts' issues. Broader questions of teaching skills and styles are beyond the scope of this document; the University's Centre for Teaching and Learning provide a range of resources to assist in these areas – see their website at <http://www.ualberta.ca/centre-for-teaching-and-learning/>.

A disclaimer: because University rules and regulations are

EAS Undergraduate Studies:

<https://www.ualberta.ca/earth-sciences/undergraduate-studies/index.html>

Faculty of Science Instructor Resources:

<https://sites.google.com/a/ualberta.ca/sci-intranet/undergrad-teaching>

Centre for Teaching and Learning:

<https://www.ualberta.ca/centre-for-teaching-and-learning/index.html>

People

Chair, Associate Chair, and Academic Directors

Department Chair: Stephen Johnston

Associate Chair, Undergraduate: Murray Gingras

Deputy Associate Chair, Undergraduate: Matthew Steele-MacInnis

Academic Director, Graduate: Kurt Konhauser

Deputy Academic Director Awards & Scholarships, Graduate: JP Zonneveld

Academic Director, Research: Dan Alessi

Program Advisors (2023-2024)

Each program within the department has its own adviser. Students who have questions about their program should be referred to these advisers. Don't try and answer these questions yourself – there are lots of details and rules. Refer the student to their program adviser.

Environmental Earth Sciences: Jeffrey Kavanaugh

Environmental Studies: Bob Summers

Geology: Matthew Steele-MacInnis

Human Geography Major/Minor & Honors: Damian Collins

Paleontology: Michael Caldwell (in the Department of Biological Sciences)

Planning: Neal LaMontagne

*EAS Major Liaison: Karlis Muehlenbachs

*Science Internship Program Coordinator: Octavian Catuneanu

Department Administrative Support Staff

ESB 1-26 is the main office for the department, and is the first point of contact for students and teaching staff. It should be your first stop as well.

Melissa Dhillon (780-492-7988, dhillon2@ualberta.ca) is the Program Administrator, so she should be your first point of contact about program questions. She is one of the primary support staff in the main office with whom you will have contact.

Sarah Rees (780-492-3265, slrees@ualberta.ca) is the Program Assistant. She is a first point of contact for students enrolled in EAS courses and one of the primary support staff in the main office with whom you will have contact.

Other Administrative staff:

- Sherry Eklund (780-492-4825, seklund@ualberta.ca) is the Executive Assistant. The EA has a wide variety of administrative duties, and supports students, staff and faculty.
- Denise Renauld (780-492-0341, edasda@ualberta.ca) is the Department Administrator. This role initiates a variety of HR, Finance, Communications, and Facilities Security for Department faculty, staff, and students.
- Dean Zaragoza (780-492-5333, zbzarago@ualberta.ca) is the Academic Department Manager (ADM). The ADM oversees the administrative operations of the department.

Other Contacts

Protective Services (780-492-5050) for incident response

(780-492-2943) for lost and found

Maintenance (780-492-4833) for urgent requests

(<https://request.facilities.ualberta.ca/>) for non-urgent requests

Instructional Technical Support

Two technicians provide technical support and coordinate the laboratory sections of EAS (Geology and Environmental Earth Science) courses. Their duties involve resourcing and organizing the lab sections, working with the teaching assistants to ensure the lab objectives are met and development of lab exercises. They will also train the teaching assistants on equipment use or on any techniques required for their teaching duties. In addition, they will help with proctoring exams in large sections or will arrange to have a teaching assistant available to help out. They will contact you if you are teaching a course for which they have some responsibility. In courses with large enrollments where no official technical support is assigned, they can be approached for help with proctoring exams and other administrative activities. If you have equipment or specimen needs you should contact one of the instructional technicians. These are people you should contact before the term begins if your course will involve them.

Darrin Molinaro (molinaro@ualberta.ca) is the primary support for the 100 level courses, EAS 200 and 225.

Marilyn Huff (780-492-8043, huff@ualberta.ca) is responsible for the intermediate and senior lab- based geology courses.

If your lectures or labs require special computer software, contact IST through the [Service Portal](#) or via phone (780 492 8000) at least 48 hours in advance of your lecture or lab. If the smart-room equipment stops functioning during a lecture, use the smart panel to alert IST. They will be there in <10 minutes.

Digital Imaging Technical Support

The Digital Imaging Facility (“the DIF”) is located in ESB 2-27 and is the focus of all matters related to digital image production including scanners, plotters, printers, copiers etc. Please see the DIF website (<https://cms.eas.ualberta.ca/dif/>) for information about the services available in the DIF lab. The complete range of equipment and software can be found on the EAS website under [Facilities](#). The equipment is available to be used for teaching purposes. There is no cost for the production of course material. The DIF website includes downloads that can be valuable

for your teaching, such as poster templates that can be used by students who are completing a poster as part of their term work. You can also borrow laptops, tablet PCs, LCD projectors and overhead projectors from the DIF. These resources are booked online via the EAS website under '[Booking System](#)'.

- Igor Jakab (780-492-0340, jakab@ualberta.ca) DIF manager and EAS WebMaster. He and the Program Assistant manage the Departmental website. He is the supervisor of the DIF and should be the one to approach when you need a specific project done. In addition, he assists with computing and imaging projects.

Teaching assistants (TAs or GTAs)

Graduate teaching assistants (TAs) fulfill a variety of teaching needs that vary from course to course. In a course with a lab, TAs will typically introduce labs, provide guidance to students during the lab portion of a course, and will contribute to the marking of the labs. In other courses, TAs may carry out a range of tasks including facilitating discussions, marking exams, helping to conduct field trips, etc.

TAs are paid for their work, and teaching assistantships are an important part of the support of many graduate students. Graduate students also benefit from the teaching experience. However, teaching assistants cannot be required to work more than 192 hours over the course of the term. This translates to roughly 12 hours per week. TAs are expected to be on campus for the term until three days after the final exam for the course to which they are assigned. Any absence from campus during the term requires approval from both the course instructor and the Associate Chair (Graduate Studies).

Programs in EAS: Where does your course fit?

Undergraduate programs in EAS

EAS offers undergraduate programs in the Faculties of Science and Arts. Official details of these programs can be found in the University Calendar. The EAS website also includes details about the undergraduate programs offered in EAS. **Students who have questions about any**

programs offered in EAS should be referred to their Program Advisor, Melissa Dhillon, or Sarah Rees.

In the **Faculty of Science**, a **B.Sc General** degree is available with an **Earth and Atmospheric Science major or minor**. Many students taking EAS courses are enrolled in a General Science degree (identified as SC010 on class lists). These students choose a major from a list that includes EAS, and a minor which may or may not be in Science. General Science students including EAS majors are officially the responsibility of the Faculty of Science for record-keeping and advising purposes. You will find, however, that a number of these General Science students are ‘tracking’ one of our specialization programs, in the hope of transferring into that program in the future. These students do not necessarily identify themselves as General Science students. In the Faculty of Science, **Honors** and **Specialization** degree programs are offered in **Environmental Earth Sciences, Geology, Paleontology** and **Planning** (Specialization only). Details about these degrees are available in the University Calendar and the EAS undergraduate studies website. The Faculty of Science **Internship Program** (SIP) can be taken by students in the Faculty of Science to take an internship in an academically-related job in industry or government for an 8, 12 or 16-month placement. On their return, they have to complete a report and give a talk about their experience as part of the course INTD 401 (SIP Practicum)

****Students will no longer be admitted in the Specialization degree programs beginning 2024. Students currently enrolled in these programs may finish.**

In the **Faculty of Arts**, students can complete a **B.A.** with a **Major, Minor or Honors** in **Human Geography**, or a **Major in Planning**. Details about these degrees are available in the University Calendar and the EAS undergraduate studies website. The Faculty of Arts’ Undergraduate Student Services is responsible for advising students completing a B.A. The Faculty of Arts’ Arts Work Experience (<https://www.ualberta.ca/arts/student-services/arts-work-experience>), offers undergraduate students in Arts career-related, paid work experience.

Courses

Course numbers

Each course is given a number consisting of a letter code and a 3-digit number. Our course designators are EAS, PALEO, HGEO, PLAN, and IPG. The first digit of the number indicates whether the course is intended for 1st, 2nd, 3rd or 4th year undergraduates, or for graduate students (5xx). Students may take courses in other years of their programs, however, in some cases, a given program may recommend that students take a course beginning with a 2 in their 3rd year. 1xx courses are also known as 'Junior' courses. Many 1xx and 2xx EAS courses are required for students in more than one program. Some 300 and 400-level courses are optional - that is to say, students are not required to take a particular course as a condition of their program.

In the timetable for any given year, the course number is followed by an A (Fall Term) or B (Winter Term) to indicate whether it is offered in the fall or winter term. If there are multiple sections of the same course, they are distinguished as (e.g.) EAS 100 A1, EAS 100 A2 etc.

Credits

Credit in U of A courses is evaluated in 'course weights' indicated by an asterisk. A typical one-term course is worth three course weights or *3 ("star-three"). A full load of courses for a student is *30 per fall/winter (i.e., five courses per term). It is worth considering this course load when thinking about the workload you expect in your course.

Cross-listed Graduate Courses

A number of our 4th year undergraduate courses are *cross-listed* with 500-level numbers. For example, EAS 425 Contaminant Hydrogeology is cross-listed with EAS 583 Advanced Contaminant Hydrogeology. Students registered in the graduate class take the same lectures and labs as the undergraduate student, however additional work is required for students in the graduate course and the work of the graduate students is expected to be at a higher standard. Importantly, additional requirements for participants in the graduate course must be identified in the course outline. You may prepare separate course outlines for the undergraduate and graduate students, or you can use a single course outline as long as the differences in

requirements for undergraduate and graduate students are clearly stated in the course outline.

Your course: Before term starts

University Calendar course descriptions

The University Calendar, which is available at <https://calendar.ualberta.ca>, is issued each year and contains all official pronouncements of the university - academic regulations, important dates, requirements for all the programs, and descriptions of all the courses offered by the university. The Calendar contains a short description of each course - a "starting point" for the content. For example:

EAS 100 Planet Earth

*3 (fi 6) (either term, 3-0-3). Introduction to the origin and evolution of the Earth and the solar system.

Introduction to plate tectonics and the rock cycle. Simple energy balances and interactions between radiation and the atmosphere, land, oceans, ice masses, and the global hydrological cycle. Evolution of life, biogeography, and global climate in the context of geologic time. The carbon cycle. Human interaction with the Earth. Mineral and energy resources. Not available to students with credit in EAS 101, 102, 201, or SCI 100 (Note: Students with credit in EAS 201 may take EAS 200). [Faculty of Science]

Because this is the only description that students may see before they register for a course, the course content should follow the Calendar description closely. However, because these descriptions are short, there is usually scope for variation from year to year. Importantly, the details of what is to be actually covered in your course must be given to students in a **course outline** (see below).

Prerequisites

The Calendar description may specify prerequisites. Sometimes a student will come to you requesting a waiver of a prerequisite. Students can obtain a waiver of prerequisite form from Melissa, Sarah or QR code posted outside ESB 1 26. Before you sign the form, be sure that the student has (a) a real need for the waiver and (b) sufficient understanding of the background material for the course. These should be made clear by the student in the area provided for 'reasons' on the form. If you are satisfied in both areas, you may sign the form. It is your

decision as the instructor if you will allow the student to take the course without the prerequisite. If you sign the form, the student then hands the form in to the Program Assistant (ESB 1-26) for approval by the Associate Chair (Undergraduate).

A student who is found to have taken a course without taking the required prerequisites, and who has not been granted a waiver on the form, may be prevented from graduating.

Course Outlines and Grading

Course outlines must be prepared before the start of term for each course offered in EAS, and sent to the Associate Chair Undergraduate (Murray Gingras) for review and approval before they can be posted online or provided to students. Course outlines for courses offered by the School of Urban and Regional Planning (students enrolled in Planning undergraduate or graduate programs) should be sent to Bob Summers.

Once you have prepared the course outline and it has been approved, the information included in the course outline should not be changed. Minor changes are possible as long as students are notified well in advance and the students are not disadvantaged. If in doubt, contact the Associate Chair Undergraduate for advice.

Course outlines must include specific information that is specified in the ‘Course Requirements, Evaluation Procedures and Grading’ section of the University Calendar.

The Faculty of Science provides a template that you can use to develop your course outline.

Importantly, this template identifies the information that must be included in the course outline.

The Faculty of Science syllabus template is available on the Faculty of Science Intranet

(‘Instructor resources’ in the ‘undergrad & teaching’ tab):

<https://sites.google.com/a/ualberta.ca/sci-intranet/undergrad-teaching>

The Faculty of Arts (for BA courses) also provides a template for Human Geography and Planning BA courses on the Arts Intranet (‘Undergraduate teaching’, ‘associate chair resources’)

<https://docs.google.com/document/d/1KxT3my3QR1C5eWI2tgdVhImXCo8OrBaXwffgb7YB>

[PDE/edit](#)).

Course outlines need to be provided to students electronically or in paper format in or by the first lecture of the course. It is a good idea to review the course outline thoroughly in the first class. As part of this review, discuss your expectations with respect to academic honesty issues and outline both permitted and prohibited behavior. If students do significant written work in the course you may wish to clearly indicate whether and how the students are allowed to quote or use text they find in published sources and on the web. For example:

All written work must be in your own words (i.e. in language composed uniquely by you).

or:

This assignment may require you to use research sources (published papers, books, web materials). If you use information from such sources in your answers, you must identify (cite) the source of your information. Even when you cite your sources of information, you must compose your own wording to convey that information.

The Code of Student Behaviour

(<https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/code-of-student-behaviour>) is a valuable resource for new instructors which describes unacceptable behavior for University Students and the discipline process. If students work in groups, let them know to what extent they are allowed to collaborate.

Instructors can assess student learning in a variety of ways. The course outline must explain how students will be assessed and once approved, assessment cannot change. Students may be assessed as individuals (eg by using exams, individual assignments), or as a member of a group (eg. group assignments). If group assessment is used in a course, instructors must be careful to ensure they incorporate a sufficient amount of individual assessment so that they can assess students as individuals. Group assessment must not be the only type of assessment used in a course. If you have any questions, please contact the Associate Chair Undergraduate for assistance.

In 2012, (former) Chair Martin Sharp provided the following advice to instructors about grading and the statement that needs to be included in course outlines:

Marking of individual assignments should reflect both the absolute level of performance of each student, and their performance relative to others in the class – regardless of whether you choose to assign numeric or alphabetic grades to each assignment. Grading should reflect the absolute and relative performance of the student (relative to others in the class), should make use of natural breaks in the distribution of marks to define grade boundaries, and should result in a mean final grade for the course that is reasonably close to the historical means given in the Grading Procedure Appendix. Historic mean grades for undergraduate courses is available at <https://policiesonline.ualberta.ca/PoliciesProcedures/Procedures/Grading-Procedure-Appendix.pdf>. Deviations from those means are acceptable (particularly in small classes), but because such a deviation signals that a specific cohort of students is weaker or stronger than those of previous years, the instructor **must** provide some justification for that assessment when they submit their grades for approval.

The following is an example of a statement about how marks will be translated into grades.

Instructors are encouraged to use something like this in their course outline:

Evaluation:

All assignments and examinations in this course will be given a numerical score. A cumulative course mark will be calculated from those scores, weighted as tabulated above. A final letter grade will be assigned based upon your cumulative mark and my analysis of the class's cumulative mark distribution. Where possible, natural breaks in the cumulative mark distribution will be used in assigning grades, but no predetermined distribution of grades will be imposed on the class. Your grade will reflect a combination of your absolute achievement and relative standing in the class. In past years, the mean grade in this course has been in the B- to B range. The mean grade this year will be based on my judgment of the overall caliber of this class relative to past cohorts.

Your course: During term

Lectures

There are many instructional styles, and it is not the purpose of this document to attempt to cover instructional styles and techniques. The University's Centre for Teaching and Learning (CTL) provides a variety of resources aimed at helping instructors enhance their skills. You can find information on these programs at

<https://www.ualberta.ca/centre-for-teaching-and-learning/>.

This section concerns mainly the 'nuts and bolts' of instruction: schedules and locations.

When

Lectures are typically 50 minutes long (for courses held Monday Wednesday Friday) or 80 minutes long (for Tuesday and Thursday). On some timetable documents the days of the week are shown as MTWRF with Thursday represented by 'R'.

Be sure to end your lecture on time, since some students have only 10 minutes to travel to their next lecture which may be far across campus. Please respect their need to be on-time for their next class. In some of the larger classes, it is not uncommon for students to start packing up – and even leaving – five minutes before the end of class. And if you're teaching first thing in the morning, don't be surprised if students drift in during the first 10 minutes or so of the class.

The major dates and deadlines for the academic year are stated in the University Calendar.

Don't forget that there are a number of public holidays that may fall during term - Thanksgiving, Remembrance Day, Good Friday and Easter Monday are the main ones. There is also a week-long break ('Reading Week') in both the fall and winter terms. In addition there is one day during winter term when student union elections occur - a single lecture period is given over to presentations by the candidates and students are supposed to be allowed to go. Avoid scheduling a test on this day!

If you need to miss a lecture, to attend a conference for example, you need to organize a substitute lecture from a colleague, graduate student, etc. You must obtain the approval of the Chair for your absence by submitting a request to be absent from campus, specifying the

arrangements you have made.

If you are sick on a day you lecture, you should call the Program Administrator at 780-492-7988, who will post a sign on the classroom door indicating that the class has been canceled. You should also notify the class directly via Bear Tracks or eClass.

Occasionally, you may receive an outside request to cancel a lecture. Most notably, this happens for certain student conferences that involve a large proportion of the students in a particular program, such as the Western Inter-University Geological Conference (WIUGC, which occurs in January). In this case, a general request is made by the Chair for certain courses to cancel their lectures.

Where

Lectures take place in a variety of rooms. Most lecture rooms are centrally timetabled by the Registrar's Office, meaning that we have to put in requests for bookings and changes of bookings to a central office. These requests are handled by Melissa Dhillon and Sarah Rees. Be aware that there is extraordinary pressure on rooms. Initial requests for room allocations for a given academic year are made nearly a year in advance, in September. So it can be difficult or impossible to change a room booking at the last minute.

Most centrally timetabled rooms are smart classrooms which have computers, data projectors, etc. It is a good idea to check your classroom in advance to identify what facilities are provided. Further information on audio-visual equipment is given in a later section.

Laboratories (Labs)

Many EAS Faculty of Science courses have labs with designated lab times, typically 3 hours per week. Larger courses will have multiple lab sections. Some introductory courses may have multiple lab sections **and** multiple lecture sections. As a result, any given lab section may contain students who come from several different lecture sections. If these lecture sections have different instructors, keeping coordination between lab and lecture content may require communication between the instructors.

Most EAS physical science labs have special equipment needs. Darrin Molinaro looks after the

equipment needs for the first-year labs and Marilyn Huff for the senior-level labs. For the Paleo labs, the lecturer of the course with a corresponding lab is responsible for all equipment arrangements. If you are planning an activity in your lab which is new, and which has equipment (or sample) needs, it's important to coordinate this as early as possible with the appropriate Lab Coordinator.

Computer labs can be booked by contacting Sarah Rees, the Program Assistant. Information about computer labs and facilities is available at:

<https://www.ualberta.ca/earth-sciences/facilities/teaching-facilities.html>

It is a good idea to 'dry run' your labs - especially computer based labs - in advance, to work out any bugs.

Certain lab rooms, as well as both computer labs, are protected by card-swipe locks. In theory, all students registered in a particular lab should automatically be given card swipe access. If you find that not everyone who needs access can get in, see the front desk in ESB 1-26.

Office hours and individual interactions with students

You are expected to make yourself reasonably available to the students in your classes. In your course outline(s), state your office hours when students will be able to meet with you outside of class time. There is no strict rule on how much time you should make available. The Faculty of Science recommends one hour of office hours per hour of lectures, and urges that instructors spread their office hours between Monday-Wednesday- Friday and Tuesday-Thursday time-slots, so as to be accessible to students with varied timetables. Students often avail themselves of office hours just before exams, and very infrequently otherwise, when email communication is more common. You may want to keep this in mind in scheduling midterms if you are teaching multiple courses in a term. Students appreciate supplementary office hours in the days just before exams.

Sometimes students may come to you with distressing stories of personal problems. Try to be sympathetic, but also remember, if giving special dispensations like extended time on assignments, that you must also be strictly fair in your dealings with students. Remember that some students may approach you with great confidence, while for others may be unwilling to

come for the help they need. It is important also to respect students' privacy. If a student tells you something in confidence, respect that confidence.

Often, students may come to see you because they are not happy with the mark they received. You must not adjust a mark just because a student complains - that would not be fair to other students. On the other hand, mistakes or inconsistencies can occur - things as simple as an addition error, for example. Any adjustment you make must be fair to all students. In general, it is better not to make a hasty adjustment right away. If you think the student may have a case, offer to take the paper back to reconsider a mark, make your decision, and return the paper to the student. Do not negotiate marks with a student.

Students alleging misconduct on the part of other students or instructors should be referred to the Associate Chair or Chair; don't attempt to handle allegations of this type yourself.

Tests and exams

Final and midterm tests

Lecture courses are expected to have a final exam, worth between 30% and 70% of the total mark. The department is required to make a justification for a lecture course that does not have a final exam, and it must be approved in advance by the Faculty. Courses whose names show that they are not conventional lecture courses (e.g. 'directed study' or 'undergraduate thesis') and HGEO courses are exempt from this rule.

Most courses have some type of midterm test, and then a final test in the formal examination period, which takes place after classes have finished each term. For large courses, you might consider having two midterm exams in addition to the final, if those exams are going to be the only evaluation you use.

Timing of tests and examinations

The timing of the midterm test is up to you, but it has to be in a regularly scheduled class.

However the timing of final exams is **not** up to you. Each timetable slot during the regular

lecture schedule corresponds with a morning or afternoon in the exam schedule. In this way, there should be no requirement for students to do two exams at once. You can find the timing of exams on the web through the Registrar's Office website:

<https://www.ualberta.ca/registrar/examinations/exam-schedules>

Sometimes a student will plead with you to move a test because they are overloaded with tests on a particular day. However, you cannot usually do this because moving a test that has already been announced in the course outline requires unanimous consent of all students. Moving a final examination requires an even more complex process to obtain unanimous consent of all students well in advance of the examination. The details are in

[https://calendar.ualberta.ca/content.php?catoid=28&navoid=6961&hl=%22final+exam%22&returnto=search#Examinations_\(Exams\)](https://calendar.ualberta.ca/content.php?catoid=28&navoid=6961&hl=%22final+exam%22&returnto=search#Examinations_(Exams))

On the whole it's better not to agree to this type of request, because it's impossible to do so in a way that's fair to all students.

Deferred assignments, tests, and examinations

The instructor can decide whether to allow students to request an extension in the event a student cannot complete an assignment on time. Your approach should be stated in your course outline. A student who misses a test or assignment *during* a course because of illness, a severe domestic situation, or other compelling reasons (including religious conviction) is required to contact you within 2 days of the test to request special consideration. You have discretion to grant an excused absence; if you do this you can either require make-up work, or you can increase the weight assigned to the final exam for that student only. You cannot require the student to provide a medical note for missed term work, but you can require them to submit a statutory declaration in place of a medical note. Your course outline should explain your approach in the event a student misses a test or assignment.

The rules for missed final tests are similar, but in this case the discretion to grant a **deferred final exam** is with the Faculty. As an instructor, you have no authority to grant a deferred final exam.

Reexaminations

Under some circumstances, a student who fails the course may request a **reexamination**. The rules for these are rather complicated and obscure. In general, a student can only **require** you to offer a reexamination final exam if:

1. they fail the course
2. the final exam was worth 40% of the marks or more
3. they have achieved an overall GPA of 2.0 (inclusive of the failed course)

Exam locations

Midterm examinations are given in the lecture room, which can pose challenges if it is a full room. You have an option for the final exam, however. Early in the term, Melissa Dhillon, the Program Administrator, will send instructors a memo asking for information about the final exam in each course. You will need to let her know the weight of the final exam, the length (duration of either two or three hours are acceptable) and whether the lecture room is satisfactory for the final. If the lecture room is full, don't hesitate to say 'no' – many final exams are written in the Butterdome or the Main Gym. In these venues, the students write at well-separated desks, which really cuts down on their ability to see others' work.

Exam formats

Test and exams can have many formats, depending on the nature of the material and the size of the class.

If you use a multiple choice format, it is possible to use computer-marked answer sheet. The test has to be set up appropriately, in advance. A word of warning – if you are using a 'test bank' that comes with a particular textbook, be sure to look it over very critically – some of our colleagues have found such test bank tests yield averages of 80% or higher, which poses a problem for your grade distribution. For large class multiple choice exams, it is typical to use two or three versions of the exam, with different ordering of questions, to cut down on cheating during the exam. Of course, this requires tracking of the different versions to ensure the appropriate key is used to mark them.

If your exam requires written answers, you may provide examination booklets for the students to write their answers. These can be obtained from the mailroom across from ESB 1-26.

If your class is large, it is wise to bring a TA or two into the class for mid-term tests and final exams, to help with the distribution and collection of papers, and the supervision of the students.

Have students sign an attendance sheet so that you have a record of students who completed the exam. For final examinations, students are required to provide identification (usually in the form of their OneCard) and it is wise to check the id during the exam or when the student is handing in their exam. Some instructors do this during midterm examinations as well.

There are special provisions made for students with physical or learning disabilities, which are dealt with later in this document.

Marking and grading system

In general, you are expected to mark and return students' work before the last day of classes. If there is a final major assignment required in the course (which may not be due until the last day of classes), this should be returned by the date of the final exam.

Once you have completed the marking of all the materials in your course, you are required to turn the marks into grades.

The University of Alberta recognizes the following grades:

Grade	Grade points
A+	4.0
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7

D+	1.3
D	1.0
F (Fail)	0.0

The number of 'grade points' beside each letter is the value that is used whenever grades have to be totaled or averaged. In most cases, the grades should be similar to the historic mean grades, which is available at

<https://policiesonline.ualberta.ca/PoliciesProcedures/Procedures/Grading-Procedure-Appendix.pdf>. If your grades are not similar to the historic mean, you will need to provide an explanation when you submit your grades.

Recently there have been issues with grades of IN ('Incomplete') and with late grade changes. Basically, if a student is given an IN grade in a course, it has to be replaced with a "real" grade in ten days, or the permission of the appropriate Associate Dean must be given.

Keep students' grades confidential. You are only permitted to post a list of marks if there are more than 25 students in the class and you must do it in such a way that students can only discover their own mark. It is best to order such lists by student identification number. If you post the list electronically as an excel spreadsheet, make sure that the version you post cannot be reverse-engineered to reveal students' names (just hiding the columns is NOT sufficient!).

You are required to finish your marking within 5 working days of the final exam or test, or the last day of classes if there is no final examination.

Final grades are subject to the approval of the Chair. It's therefore unwise to tell the students their marks in advance of official posting.

You are not required to hand back final examinations to the students, but please note that we are required to retain the examinations for a year in case of a grade appeal.

Students with disabilities

The University of Alberta makes special provision for students with documented physical and learning disabilities, through Accessibility Resources (AR). Accessibility Resources will email

instructors with information about any students requiring accommodations. Among other services, accommodations may include:

Special exams: students registered with AR may require extra time or other accommodations to complete exams. You will receive an email from AR which indicates that your student requires a special examination. You then provide your exam to Accessibility Resources well in advance of the exam date. The student will take the exam at the same time as everyone else, but will receive extra time and/or space at Accessibility Resources. After the exam, you can pick up the paper for marking, or have it sent to you under seal. I strongly recommend you pick it up rather than having it returned by the student or via campus mail.

Note-takers: When a student has difficulty taking notes during lectures, a representative from Accessibility Resources may ask to make an announcement in an early lecture in a course. This announcement will ask for volunteers who can take notes on special carbon-copy paper for the benefit of an (unidentified) disabled student. Usually there are more than enough volunteers for this. For hearing-impaired students, sometimes an interpreter or note-taker will ask to be present in the classroom.

Wheelchairs: some classrooms are not very wheelchair-friendly; minor rearrangements to the furniture may be required.

Teaching evaluations

Completion of evaluations by students

Towards the end of each term, you will receive an email with a reminder when the eUSRI's will open to students. You are encouraged to remind them to fill out the evaluations during the designated time. The eUSRI's are scheduled to open the week prior to the last week of classes for each term, this includes classes with enrollments of 4 and above. Courses with less than 4 students will fill out paper questionnaires provided to you by the Program Administrator. The questionnaire itself contains both 'multiple choice' items on a scale from 1 – 5 as well as space for students to write what they liked/disliked about the course and what could be improved.

Results

The results of the evaluation are not returned to you until after the final exam and grading of the course are complete. You can view the evaluation results online on the Information Services & Technology USRI website

(<https://ist.ualberta.ca/services/tsqs/universal-student-ratings-instruction>). The results show student rating for each question and the median. Typically, the median scores are listed alongside the 25th, 50th, and 75th percentiles achieved by your peers teaching similar-sized classes at similar levels. There is also a value called the Tukey Fence. As I understand it, this is a value below which no results would be expected to lie if the results followed a 'normal distribution' or 'bell curve'. If a number falls below this threshold it is an indication that there's something going wrong between the students and the instructor.

The results of course evaluations are sometimes disheartening; remember that your students are protected by anonymity, and some will be very blunt or rude, or will complain about things that are beyond your control. Try to take the reasonable comments seriously; most students will try to be constructive. However, don't feel that you have to respond to every comment with a modification to the course; if you change the course abruptly, a different group of students may complain about the change next time.

Both the scores and the written answers are reviewed by the Chair only, and you will probably receive some feedback from the Chair. For those in tenure-track positions, the FEC (Faculty Evaluation Committee) will have access to the numerical scores and comments when it reviews your position.

Resources and their availability

Textbooks

A request for textbook orders is circulated to all instructors well in advance of the start of the course. Students are expected to obtain any books that you specify as **required textbooks**. The University Bookstore, located in the Students' Union Building, typically orders sufficient stock

of required textbooks for all registered students. However, some students buy their textbooks second-hand. You may receive enquiries from students about whether they can use older editions; you may wish to check the content of these before commenting.

Publishers of textbooks will often supply support materials (graphics, test questions etc.) free of charge to instructors who require students to use their texts. These can be an excellent resource. However, beware that test banks and study guides are often not written by the textbook authors, and may not be of the same quality. You should carefully review any materials you use.

AV equipment and supplies

Most classrooms at the University of Alberta are Smart Classrooms and have computers with Microsoft Office and other software, data projectors, and connections so that you can project from your own laptop. For a list of smart classrooms and related information, see the Information Services & Technology Labs & Classrooms website (<https://ist.ualberta.ca/services/labs-classrooms>).

If your class is in another room, contact Melissa Dhillon (ESB 1-26) and book departmental equipment. The department has data projectors, laptop PCs, and tablet PCs. You will need to pick these up and return them at times when the offices are open. You are asked to try to check carefully that you put all the supplied cables back in the case, for the benefit of the next user.

If you need to book AV equipment for a classroom, it is advisable to book well in advance. It's also a good idea, especially for the first few uses of any computer-based equipment, to try out your presentations ahead of time **using the exact equipment you will use in class** so as to avoid compatibility problems involving hardware, software, network connections etc. A “plan b” for when the electronic wizardry doesn’t work isn’t a bad idea...

Whiteboard pens and erasers, overhead projector pens, and overhead projector transparencies can be obtained from the main EAS office ESB 1-26.

Computing in the department

The EAS department has computer labs in Tory 2-87 and CCIS L1-219. Detailed information about these labs is available online

(<https://www.ualberta.ca/earth-sciences/facilities/teaching-facilities.html>).

Computer labs typically require particular software. Discuss your software needs with IST in advance, so that software can be placed on the hard drive images, and loaded onto the computers. It's a good idea to 'dry run' your labs - especially computer based labs - in advance, to work out any bugs.

eClass and e-learning

As of September 2012, the University uses Moodle (rebranded locally as eClass) for the Course Management System. This system is used by instructors for managing and delivering material to students. Materials are housed on a central server, and students view them using a web interface. The instructor can upload and manage course materials, also using a web interface. eClass does allow you to limit access to course materials through passwords, and to deliver marks privately to individual students. To start using eClass, instructors request their course in eClass via the eClass login webpage (<https://eclass.srv.ualberta.ca/portal/>). An eClass overview for New Instructors is available from IST eClass Support (<https://support.ctl.ualberta.ca/index.php?/IST/Knowledgebase/List/Index/22/eclass>). IST eClass support provides training and support for instructors.

Printing and photocopying

There are several methods for printing course materials for classes.

Coursepacks

For bulky materials (10s of pages per student) it is possible to have a coursepack printed, for sale to the students. The originals have to be taken to SUBprint for printing. The coursepack is sold to students at the bookstore. SUBprint provides detailed information about Coursepacks on their website (https://subprint.ca/infopage?file=coursepacks_en).

Printing at the DIF

The DIF lab (ESB 2-27) includes printers that can be used to print course materials. A one-card

is needed to access the DIF lab. Each course is allocated a code, which is stated on the EAS intranet website <https://ssl.eas.ualberta.ca/saml/intranet/>. Instructors can also request printing and copy codes from this website. For further information, please contact Igor Jakab in the DIF lab.

In addition to regular printing, the DIF lab is also set up to complete specialized printing including colour items, large format, plotted maps, etc. See Igor Jakab to arrange for printing. The department encourages reasonable requests to upgrade collections of printed materials for teaching purposes, especially if we can utilize the printing resources of the DIF.

Burke Online Printing

Printing requests can also be [submitted online to Burke](#), and materials delivered directly to the Department.

Copyright

The University of Alberta Copyright Office provides information to instructors (and researchers and students) about copyright issues that affect their teaching, including course readings and instructional materials. See their website

(<https://www.ualberta.ca/copyright/student-staff-guide/for-instructors>) for more information.

The Copyright Office has also prepared Copyright resources for instructors, which are available from this website.

Instructors can use the library's Reading List service to locate links to e-journal articles, ebooks, ebook chapters and/or websites. Once prepared by the library, you can then provide them to your students via eClass, email, etc. For more information, see

<https://guides.library.ualberta.ca/accessing-library-online-resources>

Other teaching materials

Courses use a variety of non-print materials including samples, laboratory apparatus, field instruments, models, video material, etc. Current materials are stored and cared for by the Instructional Technical Staff and our Collections and Museums Administrator Lisa Budney. If

you find equipment or specimens that are broken, worn out, or missing, you should notify the appropriate technician.

Some classes require occasional major capital expenditures - new computers and microscopes are examples. Requests and suggestions of new capital needs should be made by mid-October, for the following year's budget.

Shipping and Receiving

Letter mail is distributed to the mailboxes located inside the inner room of ESB 1-25. Outgoing letter mail can be left on the outgoing counter tray, either with postage applied, or a mailing slip attached with appropriate speedcode. You will be notified by email if a package has been delivered for you- packages can be retrieved from ESB 1-29. Outgoing packages can be left on the right hand side counter beneath the window. A completed [shipping form](#) must be attached. Same-day pick-up can be arranged by calling the Pick-up number included on the form. Otherwise pick-up will occur on the next scheduled delivery day (delivery days alternate).

Complaints and things that may go wrong

Inappropriate academic behavior

Academic behaviour is governed by the Code of Student Behaviour, which you can find at <https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/code-of-student-behaviour> The Code of Student behavior includes detailed information about academic offences, sanctions, the discipline process, and appeal procedures.

Inappropriate academic behaviour includes the following:

1. Plagiarism
2. Cheating
3. Misuse of confidential materials
4. Research and Scholarship misconduct
5. Inappropriate behaviour in professional programs
6. Misrepresentation of facts

7. Participation in an offence committed by another

Vice-Provost and Dean of Students provide valuable information for Instructors about how to build academic integrity into the classroom (see <https://www.ualberta.ca/provost/dean-of-students/faculty-staff-resources/academic-integrity>). The website includes valuable suggestions about how to prevent academic misconduct.

If you believe that a student has committed an academic offense, take the following steps:

1. First, you must make an appointment to meet with the student concerned. Let them know the reason for the meeting. Even if you think several students were involved, meet with them individually.
2. When you meet it is a good idea to have another person in the room as an observer and witness. However, the meeting is a conversation between you and the student, so the observer should not be a major participant.
3. During the meeting, explain the situation to the student, and give the student the opportunity to provide a plausible explanation or to take responsibility.
4. If after the meeting you still believe that the student has broken the code of behavior, you must turn the case over to the Dean of Science (or Dean of Arts for HGEO courses). In practice, it is one of the associate deans who usually handles these cases.

Some things to note:

The Chair and Associate Chairs of the department are not involved in the process. However, the Associate Chair (Undergraduate Studies) can advise and may be available to act as an observer at the meeting with the student, if you wish.

You must not adjudicate a penalty yourself. If you judge that an offense has occurred, and you attempt to penalize this by just giving a mark of zero, for example, the student could appeal the mark because due process has not been followed.

In practice, the only way you can give a low or zero mark is if you take the position (on the

basis of the student's explanation or other evidence) that no actual academic offense occurred, but that the work done by the student was deficient in quantity or quality. This may be a useful recourse in circumstances where you cannot demonstrate that cheating occurred, but an unreasonable 'shortcut' was clearly taken.

What if a student complains?

Concerns during the course

Although we hope all our students will appreciate our courses, it is inevitably the case that a student will sometimes complain about a course.

If a student has a complaint about some aspect of a course, the first step, as in the previous section, is a meeting between the student and the instructor. If the complaint is of a minor nature, perhaps about the marking of an assignment or test, typically the student will just visit during your office hours. Discuss the question reasonably and respect the student's view. In general, it is better not to try to re-evaluate the work while the student is present. Most students will be satisfied if you take the paper back to reexamine the mark, make your decision, and return the paper to the student in due course. This enables you to make a decision which takes into account the rest of the students in the course. **Do not get into a situation where you are negotiating for marks with a student.**

If the situation becomes acrimonious, or if you believe a student's concern is a broader issue involving allegations about conduct, it may be wise to postpone discussion until you can have someone else present as a witness. The student may wish to bring a support person too. The University has a Student Ombudservice which can help in this way.

<https://www.ualberta.ca/current-students/ombuds>

If the concern cannot be resolved by a meeting between yourself and the student, the student may contact the Chair of the department.

Appeals

Students have the right to make an appeal against a grade that they believe is unjustified. The Academic Appeals policy is available in the University Calendar and online at

<https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/academic-appeals-policy> .

Students are advised to first make an appointment to see you, at which they outline their disagreement. If you wish, you may arrange for another person to be present. If consultation with you does not resolve the issue, the student may contact the Chair of the department. If the concern is only about the marking of a final exam, the student may apply to the Chair to have the exam **reappraised**. Otherwise, the Chair will try to resolve the issue. If this is not successful, the student then contacts the Dean of Science (for students completing a BSc) or Dean of Arts (for students completing a BA), who may resolve the issue or who may invoke a more formal appeal process.

You must arrange your preliminary meeting with the student so as to allow sufficient time, if necessary, for students to proceed with appeals by the appropriate deadlines. For example, the application deadlines for reappraisal of exams are February 1 for fall courses and June 25 for winter courses.