# TA'ing in the Sciences

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(www.mathstat.uottawa.ca/Profs/Jessup/TAtalk/grading.htm)

#### • Introductions & General Remarks

- Evaluation is an important and necessary part of university life.
- It has a dual role
  - · to help students learn
  - to invest some meaning in a degree from U of O.

strike a balance

- It can be pleasant/unpleasant, since some students succeed and some don't.

#### A serious matter: it affects

- · students' timely success
- · success at all!
- · scholarships, loans, awards
- · relationship of students with parents, etc.
- · atmosphere in classroom

# Never be casual about it

- Students have the right to see any graded work upon request and can have it re-graded.
- Students appreciate positive, constructive feed-back. Evaluation should aim to encourage students, without misleading them.

#### • Purposes

- to help students learn, motivate them to learn
- to let them know what they understand, what they don't (Both "√" and "this isn't correct" are important)
- help students in their choice of a career
- to help the professor know what's getting across
- to determine academic progress

• Some Myths  $(K_i > 0)$ 

- Quality of education =  $K_1$ . exam difficulty

- Students' satisfaction =  $K_2$ . average grade +  $\frac{K_3}{\text{thoroughness of marking}}$ 

- Strict grading motivates students

### • Responsibilities of Prof. and TA

#### - Professor:

- · determines the nature of the evaluation
- · determines standards for tests, assignments, reports
- · sets tests, assignments, reports
- · determines grading schemes
- · determines all policies re: late assignments, reports, missed tests, etc.
- · has ultimate responsibility for <u>all</u> marks
- · administers the tests, labs
- · marks the students' work

#### - The TA:

- · administers the tests, labs
- · marks the students' work

#### • Exceptions: the real world

If the TA is responsible for

- · setting tests, assignments, reports
- · determining grading schemes
- these must be consistent with
  - · course goals
  - · other sections of the same course, or other language homologue.

# ⇒ discuss these matters with the prof!

#### • Frustrations

- exact responsibilities 'evolve', or are unclear
- overwork
- student dissatisfaction

#### MAT 1341A ESTIMATE OF DUTIES

Enrolment: (est. 240)

Duty	Hours allotted
Miscellaneous	
Meetings with supervisor 6 @ 1/6 hr Learning computer entry of grades	1 1
Tutorials, etc	
proctoring diag, mini-tests tutorial preparation: 9 @ approx. 2 hours 9 tutorials @ approx. 1.5 hours Office hours:	5 18 14 13
Grading, etc.	
Reviewing solutions prior to grading: 3 @ 2/3 hr 1 diagnostic @ approx. 1/2 min each for 240 students 2 mini-tests @ approx. 7.5 mins each for 240 students Writing summaries of students' problems 3 @ 1/3 hr Entering grades on computer (3 tests @ 1 hr)	2 2 60 1 3
Total	120 hrs.

#### Notes:

- 1. If at any time it seems that you have not been given sufficient time for a task, please see me immediately.
- 2. Please note that this requires you to work more than 10 hours in some weeks. In particular, please take note of the test schedule: Diagnostic test Sept. 17, Mini-test 1 Oct. 1, Mid-Term Oct. 21, Mini-test 2 Nov. 19.

#### • Grading

Must be

- Objective and Equitable: not affected by
  - · like/dislike of student
  - · handwriting or presentation (unless specified)
  - · gender, ethnicity, etc.
  - · your mood (maybe later?)
  - · fatigue (take a break!)
  - · contrast effect (good/bad papers)
  - · order effect (same incorrect response n + 1 times -make a note, tell the prof, take a break!)
- Valid: the mark should reflect the degree to which course objectives are achieved. Follow the grading scheme.

### Nuts and Bolts of Grading

- 0. Pick up the papers in a timely fashion. Establish a timetable with the prof/other TAs.
- 1. Study and check the solutions, the marking scheme. (Or: -1. prepare solutions, scheme and check with the prof.)
- 2. Choose  $\geq$  6 papers at random, read without assigning a grade, note the range of quality (to counter the contrast and order effects)
- 3. Look at the grading scheme again. Is a potential disaster looming? (av.=95%, 25%) Is this really a disaster? -check with the prof/other TAs. Take a few graded papers to the prof to check.
- 4. Mark one question at a time, with as few interruptions as possible, taking short breaks only. (Choose a realistic pile).

# • Nuts and Bolts of Grading, cont.

5. Stick to the criteria - note exceptions and common mistakes on the scheme, and what you do. Ask if you're in doubt.
(example)

### • Nuts and Bolts of Grading, cont.

- Shuffle papers or piles after grading each question.
- 7. Check/note your time. Avoid overworking or underworking, consult the prof. if necessary. Don't rush.

# - 8. Comments on Papers

- · make them precise, and useful
- · be as positive as you can
- · use "please see solutions/prof/me" judiciously
- · avoid the use of exclamation marks in a negative sense (e.g. "×!!!", "NO!")
- · avoid sarcasm. It is never appreciated.
- · Never write a gratuitous comment in frustration. If you feel one coming on, take a break.

### • Nuts and Bolts of Grading, cont.

- 9. Return the papers in a timely fashion.
- 10. If not done earlier, ask the prof to check a sample of your grading.
- 11. Discuss common problems/approaches with prof. (Written summary?)

### • After Grading

- Returning papers to students
  - · be aware it can be an anxious time
  - · announce distribution of grades
  - · never be flippant about the results
- Reviewing papers
  - · don't make special exceptions you haven't made before
  - · be prepared to admit an error
  - · refer 'difficult' cases to prof.

# • Administering Tests/Labs

- be organized
  - · who is picking up the exams, exam booklets, scrap paper?
  - · will the office be locked when you plan to go there?
- arrive early (at least 5-10 minutes)
- start/finish all students at the same time
- be prepared for questions
  - · know the exam, or how to quickly contact someone who does
  - · know what you <u>can</u> say (e.g. "what's a parallelepiped?", "what does 'inconsistent' mean ?")
- move around the room quietly
- be ready for the end of the test

#### • Academic Fraud

- the vast majority of students don't cheat and do care when others do.
- read the relevant section in your faculty handbook.
- procedures: (tests)
  - give an individual warning, tell another TA, be sure.
  - · keep relevant evidence, ask the student(s) to leave.
  - · write an account of events asap.
  - · be polite but firm at all times.
  - · tell the prof, be prepared to recount to a committee of the faculty.

#### (papers)

· show the prof, ask for direction.

### Academic Fraud, cont.

- sanctions:
  - · F for the work/course
  - · loss of all credits for the session
  - · loss of all credits for the year
  - suspension from the program or faculty  $(.5 \le T \le 3)$
  - · expulsion from the Faculty
  - expulsion from the University  $(T \ge 3)$
  - · revocation of a degree

# Summary

- Get yourself enough time then use it all.
- Use a detailed marking scheme be thorough.
- develop good grading habits be fair.
- be encouraging without misleading
- consult the prof. when you're unsure
- get back to the thesis!