Ranking Graduate Student Scholarships

Several times over the year, the department is asked to rank order student applications for scholarships, e.g., for NSERC PGS scholarships and for the University of Calgary Open Scholarships. This ranking also includes a few sentences that summarizes why the student is at that ranking. This ordering is usually forwarded to a university-level committee that then independently decides which students get the scholarships. Depending on the competition, a quota may be imposed, where we are only allowed to forward a certain number of scholarships.

This document suggests a process that a scholarship committee can use for reviewing and rank-ordering students. The guidelines below are suggestions only; it is intended to supply a baseline process so that a process need not be reinvented every year.

For students, this process helps reveal how our scholarship ranking process works. You should use any insights gained to produce the best scholarship application you can.

What To Do Before The Meeting

Members of the scholarship committee will do the following steps before meeting. Note that PhD students and MSc students should be handled separately.

Step 1. Summarize the Student Abilities in a Chart

Because the scholarship committee will be dealing with many student applications, it is important that each committee member (the evaluator) creates a summary chart for each student.

This chart will help the evaluator fairly rank the students before the meeting. During the committee meeting, it will help all reviewers compare their reasoning for interpreting a student’s strengths and weaknesses; this is important, for there will likely be no time to review the full application during the meeting.

An example chart is attached in Appendix 1. Note that almost all columns include a 4 point rating, as explained in Appendix 2, as well as brief free form short notes. Suggestion: The chart could be compiled as a spread sheet. If so, the evaluator can calculate a weighted summary score from the individual scores given in each column.

Things the evaluator should consider (as reflected in the chart) include:

- **Academic programs and length in programs.** Summarize what program a student is in and how long they have been in various academic programs.
  - This helps the evaluator calibrate judgments of a student’s accomplishments. For example if the student has published only one technical report this may be quite good for a just-starting MSc, but quite poor for the 3rd year PhD student.
  - The evaluator may judge students who have been in earlier programs for a long time more critically than those who have finished quickly unless there is a reasonable explanation (e.g., a PhD who took 4 years to do an MSc vs. one who took 1.5 years).
• **GPA in various programs.** GPAs will usually be calculated by the Graduate Administrator staff, as different scholarships have different rules for deciding what years and courses ‘count’ for this GPA. While weak GPAs at the undergraduate level may be discounted somewhat for those who have excelled in graduate school, remember that other committees who review these applications may not be so gracious in interpreting a low undergraduate GPA. In general, low GPAs are looked down upon, and need to be explained in the accompanying note.

• **Scholarships.** Previous successes at receiving major scholarships are usually indicative of academic recognition. However, international graduate students at Calgary are not allowed to apply for various scholarships, so the evaluator must take this into account when judging the student.

• **Publications.** Publications are direct evidence of research ability and writing. Senior students (e.g., PhDs) should have some publications. Yet rating publications should be more than just a count. The evaluator should look at author order, venue quality, type of publication (journal vs. conference vs. workshop vs. poster vs. tech report, etc). Disciplines also have varying norms for expected numbers of publications. For example, theory students tend to produce fewer publications when compared to systems-oriented students.

• **Proposal.** A proposal can be judged both by its structure (e.g., motivation, definition of problem, goals, methodology, and expected contributions) as well as its content (assuming the evaluator can fairly judge the quality of the proposed research). Expectations of proposal quality should increase with the number of years the student has been in a graduate program.

• **Referee reports** are critical because they reflect first-hand experiences of the student’s abilities. However, the evaluator will likely find that many referee reports are fairly glowing. Thus the evaluator will have to read them closely to find cases where a student either stands out or has weaknesses.

• **Oral and written communication, plus leadership.** You will usually find evidence of these in the referee letters, although some referees omit this.

• **Work experiences.** Some students have experience working as a research assistant and/or in an industry-related job. The evaluator should consider this as part of the student’s background preparation and research experience.

• **Notes.** The evaluator should keep notes! This isn’t a bean-counting exercise. Notes will help the evaluator highlight strengths, weaknesses and mitigating factors of the student, which can be used to discuss the student during the meeting. Notes also form the basis for the text that must be forwarded with the student rankings.

### Step 2. Providing an overall rating

The chart includes a summary rating column (out of 10) for the student, chosen according to the overall rating scheme in Appendix 2. The evaluator should be careful about giving too many students very high ratings — this will only make it more difficult to rank order them. Evaluators should rank students to expectations commensurate with their year in
the program: as previously mentioned, it is unfair to compare (say) a just-entering MSc student with a 3\textsuperscript{rd} year PhD student.

**Step 3. Sort the list by your overall rating**

This will give you a ‘first cut’ of the rankings.

**Step 4. Fine tune the rankings**

Within each ranking category (e.g., students who have received an ‘8’), reorder them as needed. If you cannot differentiate between close students, then just leave them.

At this point, you are done until the committee meeting.

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### What to do at the Committee Meeting

During the meeting, the scholarship committee members will look at the combined overall rankings of students as a first pass, and then discuss each student in turn. Again, PhD and MSc students are considered separately. Here is one way to do it.

**Step 1. Create a PostIt note for each Student**

Put the person’s last name on a large PostIt note.

**Step 2. Add the summary rankings to the PostIt**

Print the summary rating of each committee member (the one out of 10) and calculate an average. For example,

```
   Doe   6
     8
   7
   7
```

**Step 3. Order PostIts by average ranking on whiteboard**

Order the PostIts by laying them out spatially on the whiteboard. Spatially cluster students who appear similar in abilities. This will provide a ‘first cut’ ranking of students.
**Step 4. Reorder as needed, until a final ranking emerges**

During the following steps, if one (or more) people stand out at the top of the ranking (especially if they have high consistent ratings), then spatially move them to the top of the list. Then consider only the remaining PostIts.

For the first reordering, identify all students with fairly consistent ratings as ‘anchors’ for that score. Create a cluster around that score. This can be done on fractional scores as well e.g., 7.6, 7.3, etc.

For a second reordering, discuss those students with inconsistent scores (using the summary charts to compare each evaluator’s appraisals) and come up with a new score. Move the student to their new place on the whiteboard.

If there is a quota system, you may want to eliminate those with a score who will clearly fall off the quota. For example, if you are only allowed to forward 8 names and have 20 applications, you may want to remove all but the top 13 from the whiteboard.

For the final reordering, you will probably fine-tune students who are very similar in abilities. At times, you will not be able to discern between them; in these cases, just do the best you can.

Exploit spatial relationships when using the PostIts. Cluster similarities, move PostIts off to the side if you are unsure of them, etc.

**Rationale**

Each scholarship meeting tends to reinvent the process. As well, each faculty member may have a different way of coming up with a judgment. While the above process is imperfect, it gives a first cut for faculty members on the committee to rate students along similar lines, and how students can be compared and ranked at the meeting. Of course, faculty members should not be limited to the above guidelines; they can and should add their own insights into each review.
Appendix 1. Summary Chart Comparing All Students

Rate the student according to the overall rating scheme in Appendix 2. Be careful about giving too many students very high ratings --- this will only make it more difficult to rank order them. Remember to rank students to expectations commensurate with their year in the program: it is unfair to compare (say) a just-entering MSc student with a 3rd year PhD student.

Some of these cells have ratings from 1 to 4. Interpret these according to the 4 point rating scheme in Appendix 2.

<table>
<thead>
<tr>
<th>Name</th>
<th>Summary rating (1 to 10)</th>
<th>Program</th>
<th>Time in program (years)</th>
<th>GPA</th>
<th>Scholarships</th>
<th>Publications</th>
<th>Proposal</th>
<th>Referees</th>
<th>Oral/written communication abilities + Leadership</th>
<th>Work</th>
<th>Notes for scholarship ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doe, John</td>
<td>6</td>
<td>MSc</td>
<td>1.5 MSc 5 UG</td>
<td>2</td>
<td>4.0 MSc 3.5 UG</td>
<td>2</td>
<td>NSERC (applied) Alta Ingenuity (applied) various others</td>
<td>2</td>
<td>1 minor workshop 1 tech report</td>
<td>3</td>
<td>(ref 1) independent thinker 2nd best of his students 2 (ref 2) good presenter</td>
</tr>
<tr>
<td>Smith, Jane</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>
Appendix 2. Rating Schemes

Ratings for summary chart cells (4 point scale)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Meaning</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Excellent</td>
<td>Absolutely fantastic; really stands out above all others.</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>About what I would expect of one of our better students.</td>
</tr>
<tr>
<td>2</td>
<td>Fair</td>
<td>A little bit above or below average. Nothing wrong with it, but not scholarship level.</td>
</tr>
<tr>
<td>1</td>
<td>Poor</td>
<td>Below expectations of a graduate student of that particular level of experience.</td>
</tr>
<tr>
<td>--</td>
<td>N/A</td>
<td>Not applicable and/or missing information,</td>
</tr>
</tbody>
</table>

Overall rating scheme (10 point scale)

<table>
<thead>
<tr>
<th>Rating</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>I view that this is one of the best students our department has seen in the last couple of years. If this student's application is not forwarded I will consider resigning from the scholarship committee.</td>
</tr>
<tr>
<td>9</td>
<td>This is a top student, perhaps the best or one of the best in his or her research group or area. It would be surprising if this student's application for a scholarship was not successful.</td>
</tr>
<tr>
<td>7 - 8</td>
<td>This is an excellent student who has demonstrated significant strength in one or more areas (in particular in research, classes, or leadership). Although the student may have weaknesses, there is clearly something special about this student.</td>
</tr>
<tr>
<td>5 - 6</td>
<td>This is a strong student who may be a good candidate for a scholarship, but there is some doubt. Possibly the student has one or more significant weaknesses such as low grades or a dubious letter that detracts from what might otherwise be a strong application. Or possibly the student is uniformly above average, but is not otherwise noteworthy.</td>
</tr>
<tr>
<td>4</td>
<td>This student is somewhat above average. Perhaps the student has shown some strength or promise, but has not yet presented a convincing case for receiving a scholarship.</td>
</tr>
<tr>
<td>3</td>
<td>I view this student as being average for this department. Although they have shown competence in their work, there is nothing about this application that strikes me as meriting a scholarship.</td>
</tr>
<tr>
<td>2</td>
<td>This is a below average student whose application for a scholarship should not be forwarded.</td>
</tr>
<tr>
<td>1</td>
<td>This is a poor student who is lucky to be in grad school in the first place. If this student's application is forwarded I will consider resigning from the scholarship committee.</td>
</tr>
</tbody>
</table>