April 21, 2016
(Last update: 04/12/16)

Handouts of the Graduate Faculty Council

Michigan Tech
Graduate Teaching Assistant Training

GTA work responsibilities are diverse depending on the roles they play

Graders or Lab Preparatory help: closely supervised; minimal interaction with students
Lab teaching assistant: closely supervised - substantial interaction with students
Recitation instructor: closely supervised – substantial interaction with students
Instructor of record: guided by a course coordinator – substantial interaction with students; carry major responsibilities

Survey of GTA Training in Departments

Departments with GTAs were surveyed: Most departments (13/17) have formal training (few hours to 2 weeks before classes). Mathematics, Humanities, Chemistry, Physics, and MEEM have many GTAs and extensive formal mentoring programs in place. The remaining 4 departments have faculty mentoring of individual TAs.

Course of Action Being Considered

I. Develop a list of proficiencies (in disciplinary knowledge, pedagogy, English proficiency and acculturation) for each role (grader, lab instructor, recitation instructor, instructor of record), that GTAs, both domestic and international, must achieve. A faculty/staff committee would help with this process.

II. Identify (or develop) resources on campus that satisfy the proficiencies. The University (CTL and IPS) has in place many formal and informal courses and other mechanisms to satisfy these requirements.

III. Ask departments to clarify how GTAs will satisfy training requirements in a timely manner. Departments may decide to take advantage of the extensive formal and informal training/mentoring/courses they have in place to satisfy most, if not all, of the requirements. Alternatively, departments can use the University offerings to satisfy the GTA requirements in pedagogy, English proficiency and acculturation training.

IV. Track and document (at the University or department level?) completion of appropriate training before serving as GTAs.

University Resources Available

1) Disciplinary knowledge: Academic departments: discipline-specific orientation programs; formal mentoring programs; required courses; informal faculty mentoring.
2) **Pedagogy**: Center for Teaching and Learning (CTL): Courses (ED0510 and ED5100); University Teaching and Learning Seminars (UTLs, 4-hour modules on specific instructional topics such as Instructional Basics, Grading, Learner-centered classroom, etc.); workshops.

ED0510: 1-credit, 7-week long. Covers course preparation, educational testing and evaluation, instructional strategies, motivating students, institutional resources.

ED5100: 1-credit, 7-week long. Covers instructional planning, delivery, and assessment in a higher education context (course syllabi, teaching portfolios, and teaching philosophy statements).

3) **Language assessment and training**: CTL: TOEFL > 79 for admitted students. Speaking assessment is conducted by CTL and the results (strong, acceptable, marginal, weak) communicated to departments. Follow-up activities by departments is not prescribed.

International Graduate Student Communication and Cultural Center (IGSC3): individual mentoring/coaching; teaching practice, acculturation training, communication practice and pronunciation assistance.

IESL conversation partners - program open to students, faculty and staff to practice communications one-on-one in an informal setting.

4) **Acculturation Training**: International Programs and Services (IPS) and Humanities Department

Rights and Responsibilities: Mandatory for all international students; taken during grad student orientation.

Life at Michigan Tech: a series of 3 seminars offered at the beginning of Fall and Spring semesters (Academic and social norms and shocking American culture; Getting ready for Winter; Winter Welcome Party).

New course being developed with funding from the State of Michigan; working name: Cultural adjustment and student expectations at Michigan Tech.
GTA Proficiencies

Background
The course of action shown below is in response to questions by the Board of Trustees regarding proficiencies required by GTAs at Michigan Tech and how the satisfactory accomplishment of proficiencies are being tracked.

Course of Action Being Considered

I. Develop a list of proficiencies (in disciplinary knowledge, pedagogy, English proficiency and acculturation) for each role (grader, lab instructor, recitation instructor, instructor of record) that GTAs, both domestic and international, must achieve.

II. Identify (or develop) resources on campus that satisfy the proficiencies. The University (CTL and IPS) has in place many formal and informal courses and other mechanisms to satisfy these requirements.

III. Ask departments to clarify how GTAs will satisfy training requirements in a timely manner. Departments may decide to take advantage of the extensive formal and informal training/mentoring/courses they have in place to satisfy most, if not all, of the requirements. Alternatively, departments can use the University offerings to satisfy the GTA requirements in pedagogy, English proficiency and acculturation training.

IV. Track and document (at the University or department level?) completion of appropriate training before serving as GTAs.

Table 1. Draft of required disciplinary knowledge graduate students in instructional roles. Departments need to complete “Disciplinary Knowledge” and “Method to Satisfy Proficiencies” in Table 1.

<table>
<thead>
<tr>
<th>Role</th>
<th>Disciplinary knowledge</th>
<th>Method to Satisfy Proficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grader/Lab Prep</strong></td>
<td>Minimal direct student contact</td>
<td>• Performance in undergrad and grad courses at a high level</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Successful completion of class taught (or equivalent)</td>
</tr>
<tr>
<td><strong>Lab Teaching Assistant</strong></td>
<td>Instructional context/policies well defined. Closely supervised</td>
<td>• Above requirements, plus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Successful completion of disciplinary material at least one step beyond class taught</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Safety certification</td>
</tr>
<tr>
<td><strong>Recitation Instructor</strong></td>
<td>Marginal flexibility in defining instructional context/policies. Closely supervised</td>
<td>• Above requirements, plus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Completion of Bachelor’s degree in discipline</td>
</tr>
<tr>
<td><strong>Instructor of Record</strong></td>
<td>Instructional context/policies defined only by curriculum/program</td>
<td>• Above requirements, plus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Degree higher than students being taught (e.g. Master’s degree to teach students in a BS program)</td>
</tr>
</tbody>
</table>
Table 2. Draft of required pedagogical proficiencies for graduate students in instructional roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Pedagogy Proficiencies</th>
<th>Method to Satisfy Proficiencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grader/Lab Prep</td>
<td>• Articulate appropriate relationships between grading, student motivation and self-assessment&lt;br&gt;• Identify effective methods of maintaining grading consistency. (Rubrics, etc.)&lt;br&gt;• Efficiently provide useful feedback to students on tests and written assignments&lt;br&gt;• Use techniques to deter cheating and/or plagiarism on assessments&lt;br&gt;• Show Understanding of FERPA as it relates to student work</td>
<td>• CTL – UTL 2&lt;br&gt;OR&lt;br&gt;• Equivalent training within academic unit</td>
</tr>
<tr>
<td>Lab Teaching Assistant</td>
<td>• Apply classroom management strategies and best practices.&lt;br&gt;• Apply a basic understanding of student motivation when interacting with students in and out of class.&lt;br&gt;• Locate and comply with university and federal regulations regarding instruction and safety</td>
<td>• CTL – UTL 1 and UTL 2&lt;br&gt;OR&lt;br&gt;• Equivalent training within academic unit</td>
</tr>
<tr>
<td>Recitation Instructor</td>
<td>• Effectively prepare/present content considering media, pace, and audience.&lt;br&gt;• Implement appropriate active learning techniques to accomplish specific goals in a classroom.&lt;br&gt;• Aggregate student feedback to address student concerns in real time during class.</td>
<td>• CTL – ED0510 (includes UTL 1 and UTL 2 plus additional content)&lt;br&gt;OR&lt;br&gt;• Equivalent training within academic unit</td>
</tr>
<tr>
<td>Instructor of Record</td>
<td>• Create and publish an interactive Canvas course (class content, pre-lecture quizzes, feedback surveys, discussion boards, etc.)&lt;br&gt;• Communicate learning and assignment expectations: Syllabus, assignment descriptions, grading criteria rubrics and examples&lt;br&gt;• Develop assignment-assessment-feedback cycles to support course learning outcomes&lt;br&gt;• Use best practices for group activities and peer review&lt;br&gt;• Use online resources to support student learning while observing copyright law and fair use principles</td>
<td>• CTL – ED0510 and ED5100&lt;br&gt;OR&lt;br&gt;• Equivalent training within academic unit</td>
</tr>
<tr>
<td>Role</td>
<td>English language proficiencies</td>
<td>Method to Satisfy Proficiencies</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **Grader/Lab Prep**          | **Minimal direct student contact**                                                                                                                                                                                            | • TOEFL score meets or exceeds admission requirements  
• Language Assessed in Testing Center  
• IGSC3 recommended to gain confidence in English communication                                                                                                           |
| **Lab Teaching Assistant**   | **Instructional context/policies well defined. Closely supervised.**                                                                                                                                                        | • TOEFL score meets or exceeds admission requirements  
• Language Assessed in Testing Center at “Acceptable” level  
• IGSC3 recommended to improve communication skills and gain confidence presenting in the lab and interacting with students  
• If language assessment is not “Acceptable”, repeat Language Assessment after completing IGSC3                                                                 |
| **Recitation Instructor**    | **Marginal flexibility in defining instructional context/policies. Closely supervised**                                                                                                                                       | • TOEFL score meets or exceeds admission requirements  
• Language Assessed in Testing Center at “Strong” level  
• IGSC3 recommended to support communication skills of instructional role  
• If language assessment is not “Strong”, repeat Language Assessment after completing IGSC3                                                                                       |
| **Instructor of Record**     | **Instructional context/policies defined only by curriculum/program**                                                                                                                                                        | • TOEFL score meets or exceeds admission requirements  
• Language Assessment in Testing Center at “Strong” level  
• IGSC3 recommended to support communication skills of instructional role  
• If language assessment is not “Strong”, repeat Language Assessment after completing IGSC3                                                                                       |
<table>
<thead>
<tr>
<th>Role</th>
<th>Acculturation proficiencies</th>
<th>Method to Satisfy Proficiencies</th>
</tr>
</thead>
</table>
| All graduate students               | • Setting expectations in graduate school  
• Expectations of graduate students  
• Academic integrity at Michigan Tech  
• Responsible conduct for research training (basic - plagiarism, mentor/mentee expectations, responsible data collection)  
• Title IX training                  | • Campus Clarity (online Title IX course)  
• Graduate School orientation OR online CITI course for basic RCR training             |
| International graduate students     | • Rights and responsibilities (immigration requirements and US expectations)  
• Academic and social norms in the US  
• Winter in the Keweenaw  
• Discussion based Title IX training that incorporates differences between other cultures and the US | • Life @ Michigan Tech seminar  
• Workshops being developed: Cultural adjustment and student expectations at Michigan Tech |

Table 4. Draft of required acculturation proficiencies for all graduate students