2017 Summer Teaching Assistant Handbook
Words from CLT Director

If I imagine my world without my teaching assistants, I definitely would be struggling teaching, in particular the large classes such as VC210 Chemistry. Early in 2013, I had frank discussion with our Associate Dean, Professor ZHENG Gang, about undergraduate students hired as teaching assistants. I had my doubts then, but shortly after that I came to know that CLT-JI recruits top students that already did score among the highest in the classes to teach. As JI continued to grow, then it became apparent to me that CLT-JI is the perfect tool that teaching faculty needs. With CLT-JI services, our faculty tends to focus more on lectures, assignments, course materials, and advising. While the teaching assistants bridge in action between students and faculty so teaching outcome quality and students satisfaction prosper better.

CLT-JI is now evolving to be able to handle the increased enrollment in students and TAs (over 250 TAs each year). The center developed an effective process using charts and interviews in collaboration with course instructors, for TAs recruiting, prepare manuals and guides explaining duties, teaching assignments, and teaching performance evaluation. A committee was formed of instructors, graduate and undergraduate representatives to award the outstanding hard working TAs and mentors. Our TAs are required to attend all year around intensive trainings and workshops to give them the essential tools and skills needed to perform their teaching duties and assignments effectively. The training materials and schedule are arranged by CLT-JI but typically conducted by an experienced faculty and outstanding TA mentors. TAs will learn how to effectively conduct recitation sessions in English, grading mechanism, handling plagiarism and JI honor code policy, avoiding conflict of interest, working closely with instructors, online course management (Canvas) to post course materials, assignments, grades, etc., all under the supervision of course instructors. The TAs also help the instructor conduct lab duties, prepare lab and project needs, advising, proctoring exams, and so on.

I have to admit that our trained TAs of CLT-JI are among the best I have seen from any other counterpart universities, including those in USA. I have hired PhD candidate TAs from SJTU and never failed that our JI TAs always mentored them instead of the other way around. The primary reason is that our TAs are progressively trained by CLT-JI while the graduate students TAs barely attend any training.

CLT-JI is proud of the majority of our TAs for possessing the tools that most instructors need to disseminate the course knowledge. CLT-JI aims to provide course instructors with qualified TAs that collectively we are able to create a more effective classroom environment, where students reach their full potential and experience the exhilaration of academic success that will last them lifetime.

A last note is to personally thank all involved faculty, administrators, TA mentors, staff and CLT-JI coordinator for their endless efforts in making the center a better place for TAs to grow academically and professionally.

Best wishes,

Prof. Thomas Hamade, Director of Center for Learning and Teaching in UM-SJTU Joint Institute
Words from CLT Coordinator

Teaching Assistants (TA) are playing significant roles and making incredible contribution to teaching and learning at JI. They served as bridge between instructors and students, providing kinds of teaching and administration assistance to instructors and variety of tutoring and guidance to students. Often, students increasingly would like and feel comfortable to discuss their questions with TAs first if they could turn for help to both instructor and TA. TAs actually contributed significantly to the learning environment in JI. More and more TAs have shown their high motivation, professionalism, enthusiasm to this job. Of course, JI Center for Learning and Teaching (CLT) spares no efforts to honor the hardworking and excellent TAs with various TA Awards, such as Outstanding TA Award, Excellent TA Award, Outstanding TA Group Award, Outstanding TA Nominees, to encourage their dedication.

Besides awards encouragement, CLT-JI has always invested great efforts on TA training program to get our new TAs explicitly aware of their role & responsibilities and well trained with skills needed before they start to work. Right now, CLT-JI is being devoted to the promotion of TAs’ qualification and professionalism by preparing TA Orientation Conference, series of workshops, other forms of activities, and TA handbook for them.

In CLT-JI, there is a group of TAs who are the leaders in training programs, working on the improvement of TA training and management, proving suggestions on various TA related issues, passing their experience, skills, enthusiasm, and ways of solving thorny problems to new TAs, and supervising other TAs to be more professional and helpful. Undoubtedly, they are TA Peer Mentors. They designed the posters for our TA Orientation Conference and TA Awardees. And they helped to modify TA job responsibilities and training policy, drafted TA Disciplines, reproofed and typeset our TA handbook. Moreover, they led most of our training workshops, observed and commented on Mid-term Student Feedback, and gave feedbacks to TAs on their views in Online Discussion Forum.

Thank all our TAs for their vigor, commitment, fairness and innovation in promoting teaching and learning environment.

Thank all TA mentors in CLT for their time, ongoing supports, creativities, initiatives and dedication. Special thanks go to SHEN Li (Chief TA Peer Mentor), LI Yingyu, ZHANG Zherui, LIN Yukai, WANG Zhiyu, XIA Dongqing, WANG Yue, XUE Tianju, YAO Kaiqi, DU Yipai, YANG Bohuan and ZHENG Huan.

We also would like to extend sincere gratitude to Associate Dean Prof. ZHENG Gang, Director of CLT Prof. Thomas Hamade and Director of JI Academic Offices Mr. YANG Yanchun for their leadership and guidance, to all our faculty who shared their insights and suggestions in Faculty Panel, Case Study and in practical situations.

Thank those who worked in obscurity. Sorry if you are not mentioned here.

It is exciting and prospective to work with all of you together to contribute to promoting JI teaching and learning environment, which should be comfortable and resourceful with curious, enthusiastic and excited participants with high expectations.

Best Wishes,

Wenfang Zhao
Coordinator of Center for Learning and Teaching in UM-SJTU Joint Institute
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# 1. 2017 Summer TA Training Program Agenda

## 1.1 TA Orientation Conference

**Time:** 8:30 – 16:00, May 20, 2017 (First Saturday of Summer Semester)  
**Location:** 328 Yu Liming Hall in JI Building

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>8:30 – 9:00</td>
<td><strong>Sign-In &amp; Welcome</strong> – Register at the registration table</td>
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</table>
| 9:00 – 9:40  | **Opening Session**  
Intro. Speaker (5 min.) – *XIA Dongqing* (CLT-JI TA Mentor)  
Welcome Remarks (7 min.) – *Prof. Thomas Hamade* (CLT-JI Director)  
Overview of the TA Training Program (8 min.) – *WANG Yue* (CLT-JI TA Mentor)  
Intro. to TA Job Requirements (20 min.) – *SHEN Li* (CLT-JI Chief TA Mentor) |
| 9:40 – 9:50  | Short Break                                                             |
| 9:50 – 11:00 | **Faculty Panel:** Q&A with JI Faculties on Roles and Responsibilities of TAs  
Members: *Prof. Thomas Hamade* (Moderator, CLT Director) and invited JI faculties |
| 11:00 – 11:30| **Annual Teaching Assistant Award Ceremony**                           |
| 11:30 – 12:30| Noon Break                                                              |
| 12:30 – 14:30| **Case Studies of Practical Situations:**  
“What would you do?” – Hands-on Problem Solving & Team Competition  
Facilitators: *DU Yipai* (Section 1), *LI Yingyu* (Section 2)  
Judge Panel: *XUE Tianju, YANG Bohuan, YAO Kaiqi, WANG Zhiyu* (Section 1)  
*XIA Dongqing, LIN Yukai, WANG Yue, ZHANG Zherui* (Section 2)  
Faculty Commenters: Invited JI faculties |
| 14:30 – 14:40| Short Break                                                             |
| 14:40 – 15:40| **Concurrent Workshops** – Choose the corresponding one  
**Option 1:** Grading Issues on Engineering Courses (328 Yu Liming Hall)  
Presenters: *XUE Tianju & YAO Kaiqi* (CLT-JI TA mentors)  
**Option 2:** Grading Issues on Humanity Courses (328 Computer Room)  
Presenters: *XIA Dongqing & ZHANG Zherui* (CLT-JI TA mentors) |
| 15:40 – 16:00| **Awards, Recognitions & Conference Evaluation**  
Case Study Team Winners / Star Members / Conference Certificates of Appreciation / Random Drawing of Participant Prizes |
## 1.2 Training Workshops & Activities during Summer 2017

<table>
<thead>
<tr>
<th>NO.</th>
<th>Program Offering</th>
<th>Date</th>
<th>Location</th>
<th>Facilitator(s)</th>
<th>Hours</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Practical Guide for Using CANVAS</td>
<td>14:00-15:00, May 17, Wed.</td>
<td>328 Computer Room</td>
<td>SHEN Li &amp; WANG Yue</td>
<td>1</td>
<td>Required for All</td>
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<tr>
<td>2</td>
<td>Guide for Exam Supervision</td>
<td>15:10-15:40, May 17, Wed.</td>
<td>328 Computer Room</td>
<td>XU Leilei</td>
<td>0.5</td>
<td>Required for All</td>
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<tr>
<td>3</td>
<td>Grading Issues on Engineering Courses</td>
<td>During TA Conference</td>
<td>328 Yu Liming Hall</td>
<td>XUE Tianju &amp; YAO Kaiqi</td>
<td>1</td>
<td>Required for Engineering Courses TAs</td>
</tr>
<tr>
<td>4</td>
<td>Grading Issues on Humanity Courses</td>
<td>During TA Conference</td>
<td>328 Computer Room</td>
<td>XIA Dongqing &amp; ZHANG Zherui</td>
<td>1</td>
<td>Required for Humanity Courses TAs</td>
</tr>
<tr>
<td>5</td>
<td>Teaching Labs &amp; Lab Safety</td>
<td>14:00-15:00, May 24, Wed.</td>
<td>JI Multi-media Classroom</td>
<td>LIN Yukai &amp; WANG Zhiyu</td>
<td>1.5</td>
<td>Required for Lab TAs</td>
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<tr>
<td>6</td>
<td>Practice Teaching Workshop 1</td>
<td>12:10-13:40, May 22, Mon.</td>
<td>228 Conference Room</td>
<td>SHEN Li</td>
<td>1.5</td>
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<tr>
<td>7</td>
<td>Practice Teaching Workshop 2</td>
<td>19:00-20:30, May 22, Mon.</td>
<td>228 Conference Room</td>
<td>XUE Tianju</td>
<td>1.5</td>
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<tr>
<td>8</td>
<td>Practice Teaching Workshop 3</td>
<td>12:10-13:40, May 23, Tues.</td>
<td>228 Conference Room</td>
<td>YANG Bohuan</td>
<td>1.5</td>
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<tr>
<td>9</td>
<td>Practice Teaching Workshop 4</td>
<td>19:00-20:30, May 23, Tues.</td>
<td>228 Conference Room</td>
<td>DU Yipai</td>
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<tr>
<td>10</td>
<td>Practice Teaching Workshop 5</td>
<td>19:00-20:30, May 23, Tues.</td>
<td>Rm. 415</td>
<td>LI Yingyu</td>
<td>1.5</td>
<td>Required for Recitation TAs (Alternative 1)</td>
</tr>
<tr>
<td>11</td>
<td>Practice Teaching Workshop 6</td>
<td>12:10-13:40, May 24, Wed.</td>
<td>228 Conference Room</td>
<td>LIN Yukai</td>
<td>1.5</td>
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</tr>
<tr>
<td>12</td>
<td>Practice Teaching Workshop 7</td>
<td>19:00-20:30, May 24, Wed.</td>
<td>228 Conference Room</td>
<td>ZHANG Zherui</td>
<td>1.5</td>
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<tr>
<td>13</td>
<td>Practice Teaching Workshop 8</td>
<td>19:00-20:30, May 24, Wed.</td>
<td>Rm. 415</td>
<td>WANG Yue</td>
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<tr>
<td>14</td>
<td>Practice Teaching Workshop 9</td>
<td>12:10-13:40, May 25, Thur.</td>
<td>228 Conference Room</td>
<td>XIA Dongqing</td>
<td>1.5</td>
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<tr>
<td>15</td>
<td>Practice Teaching Workshop 10</td>
<td>19:00-20:30, May 25, Thur.</td>
<td>228 Conference Room</td>
<td>YAO Kaiqi</td>
<td>1.5</td>
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</tr>
<tr>
<td>16</td>
<td>Practice Teaching Workshop 11</td>
<td>12:10-13:40, May 26, Fri.</td>
<td>Rm. 415</td>
<td>WANG Zhiyu</td>
<td>1.5</td>
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<tr>
<td>17</td>
<td>Practice Teaching Workshop 12</td>
<td>19:00-20:30, May 26, Fri.</td>
<td>228 Conference Room</td>
<td>ZHENG Huan</td>
<td>1.5</td>
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<tr>
<td>18</td>
<td>Teaching Strategies – Active Learning</td>
<td>14:00-15:30, May 31, Wed.</td>
<td>228 Conference Room</td>
<td>DU Yipai &amp; LI Yingyu</td>
<td>1.5</td>
<td>Required for Recitation TAs (Alternative 2)</td>
</tr>
<tr>
<td>19</td>
<td>Mid-term Student Feedback</td>
<td>During the 7-10th week</td>
<td>see announcement on Canvas</td>
<td>All TA Peer Mentors</td>
<td>1-2</td>
<td>Upon request</td>
</tr>
<tr>
<td>20</td>
<td>Online Discussion Forum</td>
<td>During the 11-13th week</td>
<td>see announcement on Canvas</td>
<td>XIA Dongqing &amp; ZHANG Zherui</td>
<td>0.5-2</td>
<td>Upon request</td>
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</tbody>
</table>
# 1.3 Academic Calendar for Summer 2017

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<td>Monday</td>
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<td>22</td>
<td>29</td>
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<tr>
<td>Tuesday</td>
<td>16</td>
<td>23</td>
<td>30</td>
<td>6</td>
<td>13</td>
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<tr>
<td>Wednesday</td>
<td>17</td>
<td>24</td>
<td>31</td>
<td>7</td>
<td>14</td>
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<tr>
<td>Thursday</td>
<td>18</td>
<td>25</td>
<td>1</td>
<td>8</td>
<td>15</td>
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<tr>
<td>Friday</td>
<td>19</td>
<td>26</td>
<td>2</td>
<td>9</td>
<td>16</td>
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<tr>
<td>Saturday</td>
<td>20</td>
<td>27</td>
<td>3</td>
<td>10</td>
<td>17</td>
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<tr>
<td>Sunday</td>
<td>21</td>
<td>28</td>
<td>4</td>
<td>11</td>
<td>18</td>
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<tr>
<td>JI Week</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>JI Term</td>
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<td></td>
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<tr>
<td>SJTU Week</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>SJTU Term</td>
<td></td>
<td></td>
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</table>

- **TA Training Program**
- **Holidays**
2. TA Job Description and Requirements

Teaching Assistants (herein after refer to TAs) are jointly supervised by the instructors and Office of Undergraduate Education (herein after refer to UEO) in UM-SJTU Joint Institute. They are expected to work generally 12 hours per week and their basic duties are specified in the following sections, and the responsibilities might be adjusted in accordance with the actual course requirements.

2.1 Communication Work

TAs are required to meet their instructors before the first lecture of the course to settle down detailed requirements and course arrangements, and keep track of the class progress during the semester. Weekly meetings between the instructor and TAs are expected throughout the whole semester. TAs are obligated to report teaching-related issues to instructor and UEO. TAs are also encouraged to notice UEO and/or Student Affairs Office about low-motivated students (such as students who never turn in assignments) in the class.

2.2 Class Assistance

TA’s regular and punctual class assistance and attendance are highly recommended (mandatory if the instructor requires). TA should assist the instructor in keeping class order, checking students’ class attendance and providing help to other teaching-related activities, such as leading group discussions and distributing and collecting quizzes. TAs are expected to understand the teaching contents well and be familiar with the functionality of classroom equipment (including microphone, projector, etc.).

2.3 Lab Attendance

TAs must attend every lab of the course except that they have permissions from the instructor. TAs are obligated to confirm the assigned lab schedule with the students and communicate with UEO academic coordinator if any time conflict occurs. If some of the students cannot attend the assigned lab section, TAs are obligated to switch them into other available sections.

Before the lab, TAs should check lab instruments and prepare necessary lab setups for the students. During the lab, TAs need to guide the students to complete their labs in a safe and proper way. After the lab, TAs must help the lab technicians to put all lab instruments in order and clean up the lab. All the new lab TAs are required to attend “Teaching Labs & Lab Safety” workshop (see Section 5.1 for detail) before holding lab sessions.

2.4 Recitation Classes

In addition to regular lecture time (i.e., lectures conducted by instructor), TAs are obligated to hold recitation classes (i.e. extra review classes) upon the requests from students and/or instructor. Generally, each recitation class will last for 90-120 minutes and requires no less than 60 minutes. The students may attend the recitation classes on volunteer basis (mandatory if requested by the instructor).

TAs are supposed to discuss with the students and find out optimal time slot to hold the recitation classes, and then reserve classrooms through Quizzes in “TA Group” site on Canvas before 11 a.m.
on Thursday of the first academic week each semester. After receiving confirmation, TAs should announce the time and location to students on the corresponding course sites on Canvas.

During the recitation class, TAs can explain more detailed course contents as a supplement to the regular lectures, discuss with students about their common problems, and prepare exercises for students to practice. However, TAs are not allowed to promise and/or give bonus to students without instructor’s permission. It is also necessary for TA to discuss with the instructor regularly in order to design their recitation classes better. Please note that English is the only official language in recitation classes (unless otherwise specified by the instructor). All the recitations TAs must attend “Practice Teaching” or “Teaching Strategies - Active Learning” workshop once (see Section 5.2 and 5.3 for detail).

2.5 Office Hour (Q&A Session)

Every TA are required to offer office hours to answer individual questions from students for at least 2 hours every week. The office hours must be held face to face. TAs should register and reserve space through Quizzes in “TA Group” site on Canvas. After receiving confirmation, TAs should announce to the students on Canvas and help instructor to update the syllabus.

During the office hour, a tag with course code and name is expected to be placed on the table for the convenience of students. TAs are not encouraged to speak loudly with students in public study areas, such as 228/328 study room and 328 computer room.

2.6 Canvas

Canvas is the official course management system of the Joint Institute, and can be accessed with jAccount at http://umji.sjtu.edu.cn/canvas. TAs will be enrolled as “TA” in corresponding course sites and as “Students” in “TA Group” site. TAs are obligated to help instructor manage the corresponding course sites, including but not limited to posting announcements, uploading resources, assigning homework, releasing grades, launching polls and creating quizzes. The information posted on Canvas will be regarded as official course policy and thus TAs must get permission from instructor before posting any material. Meanwhile, TAs should check “TA Group” site regularly throughout the semester to get updated with information related to their jobs. All the new TAs are required to attend “Practical Guide for Using Canvas” workshop in order to manage course sites properly and efficiently (see Section 5.4 for detail).

Please note that all the social medias, including QQ and WeChat groups, are strictly prohibited to be used for sharing course materials (especially unauthorized textbooks and recitation slides), posting announcements, or discussing course plans. Any course-related information must be posted on Canvas or be announced by the instructor during lectures.

2.7 E-mails

E-mails are also an important communication channel among instructors, TAs and students. TAs are obligated to respond to e-mails from students within two working days. The language used in e-mails is required to be English (unless otherwise specified by the instructor), even if the student uses Chinese or other languages. TAs are encouraged to carbon copy e-mail to the instructor if necessary.
2.8 Homework

TAs should actively get involved into homework collecting, grading, problem solving and score releasing. Lab TAs should also undertake experiment tutorship and lab reports grading. Without the instructor’s permission, students’ overdue homework should not be accepted. TAs should finish grading, release scores on Canvas, and return the assignments to students within reasonable time (detailed requirements in Section 2.10). TAs are highly recommended to return assignments during lectures and properly keep the remaining works for at least a week. All the exam-related assignments should be returned before the exam, if possible.

2.9 Exam

TAs are required to be present in all types of exams (including quizzes, midterms and finals) as proctors. If the responsibility is not able to be fulfilled due to some personal reason, he/she should inform UEO in advance and help arrange a suitable replacement.

Exam proctors should follow the examination rules and discipline of Shanghai Jiao Tong University. TAs are obliged to report any types of Honor Code violation cases in an exam to the instructor, JI Honor Code Council and UEO right after the violation is confirmed. All evidence and supportive materials should be well kept and transferred to the units above altogether.

After each exam, the exam papers and answer sheets should be counted on the spot before the examinees are allowed to leave the exam room. All of the papers and answer sheets, together with the monitor registration material, should be handed back to UEO academic coordinator or the instructor’s office as soon as the exam is finished. TAs are strictly prohibited to bring exam papers, no matter graded or not, back to their dorms. All the TAs must attend “Guide for Exam Supervision” workshop before the exam (see Section 5.5 for detail).

2.10 Grading

Different TAs from the same course should remain consistent standard in grading. In principle, each part of an assignment should be graded by the same person. TAs are required to put red marks and/or write feedbacks on students’ works. All the TAs must attend corresponding “Grading Issues” workshop (see Section 5.6 for Engineering courses and Section 5.7 for Humanity courses) before they can grade students’ works. Further training towards specific courses from instructor are encouraged.

TAs must finish grading and release scores on Canvas within reasonable time – specifically, one week for assignments, quizzes and exams, two weeks for essays, lab reports and projects. The scores must be kept confidential and only accessible to the corresponding student, the instructor, the TAs for that course and UEO. TAs are strictly prohibited to ask others to help with score recording and/or tell one student’s score to others without the student’s permission. The mean and median scores for all the works with grading weights higher or equal to 10% of the total course grade should be announced on Canvas.

Score-checking sessions should be open for all the works with grading weights higher or equal to 20% of the total course grade (final exam can be excluded). TAs are obligated to help instructor organize those sessions and keep students in order. TAs must avoid photographing and modifying
exam papers during the sessions. Any violation of Honor Code should be reported to the instructor and JI Honor Code Council. If there is any mistake in grading, TAs must check with the instructor before changing the scores. Those high-weighted works (especially exam papers) should be handed over to UEO after score-checking sessions, and the grades cannot be changed once the works are submitted. TAs are required to double-check final exam papers if the papers are not opened for checking.

TAs are encouraged to help instructors with letter grades calculation based on course syllabus. According to JI’s grading policy, the available letter grades are A+, A, A-, B+, B, B-, C+, C, C-, D and F (note that there is no D+ nor D-), with D as the minimum passing grade. Please note that TAs can only provide the numerical overall score for instructor’s reference, and are not allowed to give letter grades. Once course grades are finalized, TAs are obligated to release them on Canvas and remind the instructor to upload them to SJTU system by him/herself.

2.11 Syllabus and Sample Copies Submission

TAs are required to collect and file necessary course materials. For each course, TAs should print out the syllabus of the course, select three samples with quality of “excellent”, “normal” and “poor” respectively from every course works (including homework, quizzes, exams, lab reports, and etc.), and submit the two-sided A4 paper photocopies to UEO. TAs should also help label the works and put them into corresponding course folders according to the requests from UEO academic coordinator. All the copies should have grading comments and the students should not be aware of whether their works are used for copies or not.

This job will be periodically checked throughout the semester, and must be completely finished no later than Friday of the 11th week in spring, 14th week in summer and 15th week in fall semester. TAs are recommended to submit copies weekly rather than do all the submissions altogether at the end of the semester. Failure to finish the sampling work without reasonable excuse will lead to a maximum of 20% deduction in salary.

2.12 TA Training and Other Tasks

All the new TAs are required to attend TA training workshops (mentioned above and detailed in Chapter 4 and 5) before conducting their jobs. TAs may also be requested to fulfill some other course-related tasks assigned by the instructor or UEO as needed. At the end of the semester, TAs will be evaluated by their instructor, the UEO, and the students.
3. TA Disciplines

This section lists the basic principles and disciplines that TAs must abide by. The failure of following these disciplines will cause serious unprofessional problems and may even lead to Honor Code violations for unethical issues.

3.1 Be Responsible and Helpful

TAs are obligated to deliver good services to instructors and students. The following terms of key principles are provided as a guideline of being a responsible and helpful TA.

1) TAs must be punctual for office hours. TAs are required to hold office hours for at least two hours every week. The office hour must be held in the assigned venue. Not showing up punctually or leaving early is strictly forbidden, even if no student shows up. Any change of the office hour must be announced on Canvas at least two hours earlier. The office hour attendance will be randomly checked by TA mentors, and all TAs are required to sign at 228 Study Room clerk before and after office hour.

2) TAs should be responsive to students’ questions. TAs are obligated to reply students’ e-mails within two working days. However, TAs are not recommended to respond student via social networks (such as QQ and WeChat). Additionally, TAs are obligated to answer students’ questions on Canvas (including comments under announcements, discussions, and Canvas mailboxes). Deleting students’ questions and/or comments on Canvas is strictly forbidden.

3) TAs holding lab sessions must enquire about available time slots for students. TAs should cooperate with UEO academic coordinator to check students’ schedule, and help to solve possible lab time conflicts. TAs are not allowed to let the students switch their lab sections by themselves.

4) TAs must handle students’ assignments properly. TAs are required to return students’ assignments within a reasonable period of time – specifically, a week for assignments, quizzes and exams, two weeks for essays, lab reports and projects. Information about when and where to get assignments must be announced on Canvas. TAs should return all relevant assignments to students before the exam.

5) New TAs must invite their instructor to attend their first and second recitation classes. If the instructor is not available, he/she can appoint an experienced TA to attend and provide suggestions.

3.2 Keep Consistency in Grading

Grading consistency is one of the basic requirements for being a responsible TA. The following items list some possible situations that may affect TAs’ judgments while grading and provide corresponding solutions.

1) TAs are required to review the course roster and report possible conflicts of interests with students to the instructor throughout the semester. TAs are not allowed to grade works from those students, includes but not limited to:
   a. Family members and relatives (including brothers, sisters, cousins and etc.).
   b. Classmates from the same year (this term is not applicable for junior and senior year students).
   c. The TA’s teaching assistant for another course,
d. Roommates and buddies,

e. Boyfriend or girlfriend,

f. Ex-boyfriend(s) or ex-girlfriend(s),

g. Any person that may affect TA’s judgment while grading.

2) TAs are welcomed to discuss those possible conflicts with CLT members (director, coordinator and TA mentors). All CLT members should value the TA’s privacy and keep him/her confidential.

3) Each part of students’ works must be graded by the same TA. If possible conflicts of interest occur, the instructors are supposed to grade those works.

3.3 Keep Sensitive Information Confidential

TAs have access to some sensitive information such as students’ grades and exam papers. The following terms emphasize the importance to keep them confidential.

1) TAs cannot share academic and/or personal information of a student with anyone except for the course instructor, other TAs in the course, and UEO. Asking others to post students’ grades on Canvas is strictly forbidden.

2) TAs are not allowed to inform some students of their grades before posting all grades on Canvas.

3) TAs must keep students’ works properly and should not leave them out in public areas.

4) The instructor may ask some TAs to review the exam paper before printing to check whether the problem statements are clear enough. In this case, TAs are not allowed to hold recitations or office hours after they checked exam paper unless they have instructor’s permission. TAs are strictly prohibited to tell students they have seen the exam paper and/or reveal contents in the exam paper.
4. Teaching Assistant Training Policy

4.1 TA Training Program

CLT-JI develops a TA training program to help TAs to get familiar with their jobs and thus benefit both students and instructor in JI. The following sections give a brief introduction to the program and explain corresponding policies.

4.1.1 Required Training Hours

All the new TAs are required to attend the following trainings in order to complete their jobs smoothly. The experienced TAs are strongly recommended to attend if they did not take them before.

1) The required training hours for all TAs involve:

a. The TA orientation conference offered twice a year by CLT-JI (usually in the first two weeks of summer/fall semesters), including:
   - Opening Overview & Introduction to TA Job Requirements (0.5 hour)
   - Faculty Panel and Conference Award Session (1.5 hours)
   - Case Study of Practical Situations (2 hours)

b. Three mandatory workshops offered during the 1st – 6th week in each semester, including:
   - “Practical Guide for Using Canvas” Workshop (1 hour)
   - “Grading Issues on Engineering / Humanity Courses” Workshop (1 hour each, only required to attend the corresponding one, see Notes for detail)
   - “Guide for Exam Supervision” Workshop (0.5 hour)

2) The required training hours for specific TAs involve:

a. TAs who hold recitations and/or exam review classes must attend at least one of the following workshops offered during the 1st – 6th week in each semester:
   - “Practice Teaching” Workshop (1.5 hours)
   - “Teaching Strategies - Active Learning” Workshop (1.5 hours)

b. TAs who hold lab sections must attend “Teaching Labs & Beyond” Workshop (1.5 hours) offered during the 1st – 6th week in each semester.

Notes:

a. TAs for fall and summer semester courses must successfully complete the required training hours within the semester they serve as TAs.

b. TAs for spring semester courses should attend as many workshops as possible in the spring semester and are required to complete the listed trainings before the end of the following summer semester.

c. TAs who fail to accomplish the required training hours within abovementioned semesters and cannot provide reasonable excuses will have a maximum of 20% deduction in salary and may affect TA enrollments in future (This term does not affect experienced TAs who fulfilled at least one TA job with job rating no lower than “Satisfactory” before May 1st, 2017).
d. “Grading Issues on Engineering Courses” are required for Engineering courses TAs (including lab courses), whereas “Grading Issues on Humanity Courses” are mandatory for TAs in Humanity courses. The attendance to mismatching section will not be counted as accomplishment of required training.

e. All TAs are recommended to attend the corresponding workshops before he/she hold recitation classes, exam review classes and/or labs.

f. TAs may register the trainings by following the instructions on TA Group site on Canvas.

g. An excused absence is required if a TA is unable to attend a workshop after receiving confirmation from CLT coordinator. TAs should provide absence form with signature of responsible person and relevant supporting materials. An unapproved ‘no-show’ will make the TA blacklisted by CLT-JI and disqualified for subsequent workshop participations.

h. TAs are expected to read the training materials provided in Chapter 5 before they attend corresponding workshops.

4.1.2 Other Trainings

Besides the required training hours, CLT-JI also offers other trainings for TAs to improve their skills. TAs are encouraged to get involved into these trainings, including:

1) Online Discussion Forum (up to 2 hours)

2) Midterm Student Feedback (up to 2 hours each time, a maximum of 6 hours)

3) Volunteering Services in CLT-JI, including but not limited to:
   a. Preparation work before TA orientation conferences (up to 3 hours)
   b. Assistant work during TA orientation conferences (up to 3 hours)
   c. Documentation work after TA orientation conferences (up to 3 hours)

4) Mentoring Services in CLT-JI, including but not limited to:
   a. Host TA orientation conferences (up to 1 hour)
   b. Be the judge panel of “Case Study of Practical Situations” session (up to 2 hours)
   c. Evaluate TAs during Midterm Student Feedback (up to 4 hours)
   d. Introduce “Overview of the TA Training Programs” (up to 1 hour)
   e. Present “Introduction to TA Job Requirements” session (up to 1 hour)
   f. Hold “Practical Guide for Using Canvas” Workshop (up to 2 hours)
   g. Hold “Grading Issues on Engineering / Humanity Courses” Workshop (up to 2 hours)
   h. Hold “Practice Teaching” Workshop (up to 2 hours)
   i. Hold “Teaching Strategies - Active Learning” Workshop (up to 2 hours)
   j. Hold “Teaching Labs & Lab Safety” Workshop (up to 2 hours)
4.2 Teaching Assistant Certificates

CLT-JI provides teaching assistant certificates for those TAs who successfully complete their trainings. Once the TAs finish their trainings, they should bring TA Training Record (see Appendix A) to CLT coordinator (see Appendix B for contacts) during the released service time on TA Group site on Canvas. The certificates will be issued before the 3rd week of the following semester.

4.2.1 Basic Teaching Assistant Certificate

All TAs who meet all the following requirements will be qualified for the “Basic Teaching Assistant Certificate”.

1) A total of 8 training hours, which can be obtained by attending:
   a. [Mandatory] The required 6.5 training hours for all TAs listed in the first part of Section 4.1.1
   b. The other workshops listed in the second part of Section 4.1.1
   c. Online Discussion Forum mentioned in Section 4.1.2, with detailed description in Section 0

2) A “Satisfactory” (or above) job rating evaluated by the instructor

Notes:
   a. The attendance to the same workshop again is welcomed, but NO training hours will be double-counted
   b. “Grading Issues on Engineering Courses” and “Grading Issues on Humanity Courses” are regarded as different workshops
   c. The 8 training hours must be fulfilled within a year (This term does not affect duel-degree program students or experienced TAs who fulfilled at least one TA job with job rating no lower than “Satisfactory” before May 1st, 2017)

4.2.2 Advanced Teaching Assistant Certificate

All TAs who meet all the following requirements will be qualified for the “Advanced Teaching Assistant Certificate”.

1) Basic Teaching Assistant Certificate issued by CLT-JI (8 training hours in total, see Section 4.2.1 for detail)

2) Another 8 training hours which can be earned by accomplishing:
   a. [Mandatory] At least one Midterm Student Feedback mentioned in Section 4.1.2, with detailed description in Section 5.9
   b. All trainings provided by CLT-JI (listed in Section 4.1)

3) A “Satisfactory Plus” (or above) job rating evaluated by the instructor

Notes:
   a. Applying for Midterm Student Feedback (MSF) of the same class for the second time worth at most 1 hour of training, and the total credit of MSF is limited to 6 hours
   b. TAs can perform MSF for another two different classes, each worth up to 2 training hours
   c. The extra training hours from Basic Teaching Assistant Certificate can be transferred.
4.3 TA Peer Mentor Program

For those TAs who would like to further develop their leadership & facilitating skills, CLT-JI welcomes them to join the TA Peer Mentor Program.

1) Being a TA Peer Mentor allows you to:
   a. Improve your organization and presentation skills by planning and facilitating TA orientation conferences and/or training workshops
   b. Work with other excellent TAs to help modify JI’s TA training programs and to provide constructive suggestions towards TA managements
   c. Share your unique TA experience by performing one-on-one consultations with individual TAs
   d. Help other TAs to improve their teaching skills by hosting their Midterm Student Feedback during their recitation classes and labs
   e. Practice your crisis management ability by getting involved with different TA-related situations and provide your solutions
   f. Become the leader for all TAs in JI and supervise them to be professional and helpful

2) To become a TA Peer Mentor requires:
   a. Basic Teaching Assistant Certificate issued by CLT-JI
   b. At least one term of successful TA experience in JI with “Excellent” (or above) job rating
   c. Demonstrated enthusiasm and teamwork skills during TA trainings
   d. Have deep understanding towards TA job responsibilities

3) To apply for TA Peer Mentor position, you need to:
   a. Download application form from “TA Group” site on Canvas
   b. Send the filled form to CLT-JI (contacts in Appendix B)
   c. Prepare a 15-minute presentation regarding TA job responsibilities in Chapter 2 (combining with your actual TA experience would be a plus)

The contact information for the current TA mentor team is listed in Appendix B and the bios for the TA mentors are given in Appendix C. TAs are welcomed to ask for their assistance. The TA mentors will also provide mentor office hours during the semester. Please refer to TA Group site on Canvas for detailed schedule.
5. Brief Introduction to TA Training Activities

The following sections gives a brief introduction of TA training activities offered by CLT-JI. TAs are welcomed to attend them after registration using Quizzes on TA Group site on Canvas. Please refer to the TA Training Policy in Chapter 4 while choosing the workshops.

5.1 Teaching Labs & Lab Safety

This lab workshop will basically cover the guidelines, lab rules and safety for JI lab teaching, including topic on preparation before lab, tips on conducting the lab, etc. New lab TA will learn how to prepare and conduct the lab class, and also be aware of any safety issue which is of most important for any lab class and experiment.

5.1.1 Workshop Outline

1) Guidelines and tips of teaching lab
   a. Preparation for the documents, facilitator, confirmation of the time, equipment and place before the lab (Case I)
   b. Guidance and supervision during the lab (Case II)
   c. Cleaning, checking and asking for feedback after the lab

2) Lab safety
   a. General safety rules including wear protective cloths, be careful with electricity (Case III)
   b. Machinery safety, how to avoid the machines from breaking
   c. Safety issues in lab, how to deal with emergency
   d. Personal safety regarding how to protect ourselves from being attacked (Case IV)

3) Reflection and discussion

5.1.2 Workshop Requirements & Preparation

TAs who attend this workshop are supposed to be Lab TAs while other TAs are welcomed as well. Please prepare your question or thinking for lab teaching and lab safety, if any, before you come to the workshop. There are some typical cases shown in workshop please read ahead of time.

5.1.3 Workshop Handouts

Please refer to the next page.
Lab Teaching Case Scenario (1)

Once Again

(In the classroom) (The day after in lab ....)

(As a result, the lab went over the allotted time once again.)

(Scenario experienced by Xu Hui in VE312, UM-SJTU JI, fall semester 2010. Pictures adapted from: Left: modified based on the picture from www.ideachampions.com. Right: Sketch by Xu Hui)

Question:

How could you make sure that your students preview lab materials before the lab?

According to your experience so far, what improvements could be made to lab materials?
Lab Teaching Case Scenario (2)

Hard Grader?

Tom and Mary were lab partners on an experiment to determine the specific heat of an unknown metal. At the end of the lab, they came up to their TA, Calvin, to check their results. Cal saw that their answer was significantly different than the expected result.

Following is their conversation:
Cal: “You might want to do the experiment again?”

Tom: “We did exactly what you said and followed the instructions in the book. We already repeated the experiment and the results came out almost the same. That can’t be the problem. What would our grade be if we handed in the results we have now? How much would you take off if we didn’t get the right answers?”

Cal: “Four points off for each incorrect answer on the answer sheet.”

Mary: “Four points…!! That’s a lot! Please don’t hit us so hard. We worked so hard on this lab.” (They looked disappointed)

Cal: “Maybe so, but everybody works hard in this lab.”

Tom: “Not really, some students take data from other students… would you please cut us a break. You know, it’s not our fault. We followed the instructions exactly and we did it twice…. Can you take 2 points off from each wrong answer, rather than 4 points?”

Cal: “I am afraid that I can’t help you, I have to treat every student equally. No exceptions.”


Question:

Do you think Cal handled this situation well?

What would be a better or the best approach to evaluate student performance in the lab?
Lab Teaching Case Scenario (3)

Power Failure

In a lab, a student leaves the incomplete circuit on the table, with two wires and their bare ends on the table and turns on the devices needed for lab, including signal source. When he reaches his hand for his bag, his sleeves accidentally touch the wire and two bare ends are connected together. At that time, his signal source gets short cut, and all oscilloscope turns off. It turns out that there’s a power failure. Other students who are doing the lab have to stop and wait until the power goes back to normal.

Questions:

What can student do to prevent such accident?

What can TAs do to prevent such accident?

Moreover, what can TAs do under this situation?

You may combine the content we just mentioned as well.

Lab Teaching Case Scenario (4)

Whose responsibility?

A student in a course built a quadrotor aircraft in his dorm alone. Tools he uses are all bought from the Internet (i.e. Taobao). Though TAs of VG100 know about the situation, they didn’t stop him. Unfortunately, he did not fix the quadrotor well before turning on the power. The blade flew out and hit his face, causing a serious bleeding situation.

Questions:

Who do you think is more responsible for the accident, TAs or the student? Why?

What should TAs do to prevent such accident from happening again?
5.2 Practice Teaching Workshop

This workshop gives you an opportunity to stand in front of a group of students and deliver a five-minute explanation on a topic that is of interest to you. You may choose your presentation topic from an array of possibilities: your research area, the class you like, or a hobby you practice. The facilitator and the audience will give you feedback based on your performance for your further improvement.

5.2.1 Workshop Procedures

(Adapted from Engineering GSI Teacher Training, U-M CRLT North)

1) You may choose a wide variety of topics for your presentation: the research area you are interested in, the course you will work as TA, or a hobby you pursue. If you have any question, you can ask the facilitator of the workshop for help.

2) You will have only seven minutes to explain your topic. You are highly encouraged to involve your audience in your presentation. Marker pens and a whiteboard will be provided.

3) When you are presenting your topic, the audience will take notes as if they were students in your class. After your presentation, your audience will complete a feedback form and you will have a few minutes to reflect on two questions:
   a. What went well?
   b. What could you do differently next time?

4) The facilitator will ask both you and the audience to respond to Question a and Question b. The feedback forms completed by the audience will be given to you at the end of the exercise.

5.2.2 Workshop Requirements & Preparation

To alleviate undue anxiety, TAs should prepare a 7-minute presentation before coming to the PT session. A list of possible topics is included below. TAs are also welcomed to go beyond the list.

1) Research or Teaching
   a. Introduction to one's research topic
   b. Introduction to lab safety
   c. Examples of the conservation equations in everyday life.
   d. A simple part of a lesson that would be given during class.
   e. Usage of free body diagrams
   f. Buoyancy and the Archimedes Principle
   g. Computer instructions, algorithms and coding.
   h. Review of chemical reactions and stoichiometry
   i. Intro to statistical methods (definition of mean, mode, standard deviation)

2) Hobby or Special Interests
   a. Teach a class on how to make your favorite dish
   b. Introduction to personal finance.
c. Give an introductory lesson to your favorite hobby (i.e., photography basics, knitting, planting flowers, any type of sports, etc.)

d. How to survive your first year at college

e. How to bargain for the best deal

### 5.2.3 Practice Teaching Feedback Form

<table>
<thead>
<tr>
<th>What went well &amp; comments</th>
<th>Some Points to Consider:</th>
<th>What to do different next time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Topic selection: Is it appropriate?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Learning goals for the lesson: Are they clear?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction: Does it stimulate interest &amp; reflection?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Background information: Is it sufficient for the audience?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Check students’ understanding: Does the presenter ask good questions?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conclusion: Summarized main points?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nonverbal: Maintained eye contact / Helpful body movements &amp; gestures / Relaxed mannerism.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal: Appropriate voice level, pace, and clarity in speech.</td>
<td></td>
</tr>
</tbody>
</table>

### 5.2.4 Workshop Reference Readings

1) Developing a teaching plan (Adapted from Engineering GSI Teacher Training, U-M CRLT North)

a. Select a topic—What do you want to teach your students? (Follow the above link to see a list of suggestions.)

b. Determine learning goals for the lesson—What do you want students to know, to do, and to feel?

c. Develop an introduction—Plan a short creative introduction to stimulate interest and reflection. What are some real-world examples or practical applications for this subject? What are some historical or personal anecdotes that would motivate students’ interest?

d. Develop the main body of your lesson—What background information do the students need to know? What examples would help them understand this topic best?

e. Check students’ understanding by designing the questions you will ask—What specific questions can you ask your students? Write down precisely how you state them, and then paraphrase them so that you have more than one way to ask the questions. Try to predict possible answers to your questions. Examples of meaningful checking questions are:

- Please give me an example.
- What is the purpose of this symbol in this equation?
- What is your understanding of ____________________________?
2) Sample Lesson Plan (Adapted from a sample practice teaching lesson by Sarah Root, CLT from U of M, [https://crlte.engin.umich.edu/resources/gsi-videos/](https://crlte.engin.umich.edu/resources/gsi-videos/), accessed Apr. 28th, 2017)

<table>
<thead>
<tr>
<th>Subject of Lesson</th>
<th>Mathematical Modeling</th>
</tr>
</thead>
</table>
| Objectives of Lesson | To define principles for mathematical modeling  
To identify principles with an example |
Manufacturing wooden soldiers and trains requires two types of skilled labor (carpentry and finishing). A soldier requires 1 carpentry hour and 2 finishing hours. A train requires 1 hour for carpentry and 1 hour for finishing. Geppetto can only have a total of 80 carpentry hours and 100 finishing hours. At most only 40 soldiers are bought each week. Geppetto wants to maximize weekly profit. Formulate a math model.” |

| Lesson Outline (Include the amount of time to spend on each part) (Overall lesson time: 7 minutes) |
| a) Introduction (30 seconds) | Ask students question(s) to determine their familiarity with the concept. |
| b) Main Body (6 minutes) | Introduce mathematical modeling principles with familiar terms (1.5 minutes)  
i. Describe objectives, constraints, and variables as goals, rules, and decisions, respectively.  
ii. Provide examples to illustrate objectives, constraints, and variables.  
➢ Objectives/Goals: minimize cost or maximize customer satisfaction;  
➢ Constraints/Rules: can’t exceed a certain amount of labor;  
➢ Variables/Decisions: make decisions  
iii. Remind students that they need to practice in order to be most efficient  
• Read an example problem to students and ask them questions to identify an objective, constraint, or decision in the problem (4.5 minutes):  
i. What is the goal of this situation?  
ii. What kinds of rules or constraints are in the problem?  
iii. What decisions need to be made? |
| c) Conclusion (30 seconds) | Recap the general principles of mathematical modeling |
Topic: Derivation of Reversible Steady-flow Work for Single Inlet and Single Outlet Device

(Received sections listed in this lesson note should be referred to VM235 textbook.)

Back to Section 4-1 on the textbook, we have derived the boundary work for a closed system, which is \( W_{\text{out}} = \int_1^2 P \, dV \). Also, we introduced two steady-flow devices in Section 5-4, turbine and compressor, which either expands high pressure and high temperature matters to generate work or uses work to compress low pressure substances. You may wonder how can we calculate the work generated or used by those open system devices. In the former assignments, we always assume them to be adiabatic and then apply energy balance and use the enthalpy difference between inlet and outlet to calculate work. In this section, we will use another widely-used assumption called internally reversible (see Section 6-6) to obtain steady-flow work.

To begin with, we now make two basic assumptions:

1. Steady-flow and
2. Internally reversible process.

The first assumption is obvious since the devices that we interested in are operated under steady-flow condition. For the second one, the reason we made it is because we need to get heat transfer \( q \) during the process. Since there is no way to tell the heat loss for an irreversible process, we have to use the Eq. 7-16 (Eq. 1) in Section 7-5 to get heat loss, and it is based on the internally reversible assumption.

\[
\delta q_{\text{int rev,in}} = T \cdot ds \quad \text{(Eq. 1)}
\]

For convenience, we will derive the reversible steady-flow work for single inlet and single outlet devices. To analysis a system, the first thing to do is to draw a sketch and choose the positive directions of heat and work (Fig. 1).

![Fig. 1 Schematic for Derivation](image)

Here the positive directions are heat transfer into the system and work done by the system. Then mass balance (Eq. 2) can be applied to the control volume as follows:

\[
\left[ m \right]: \frac{dm}{dt} = \dot{m}_{\text{in}} = \dot{m}_{\text{out}} = \dot{m} \quad \text{(Eq. 2)}
\]
Starting from what is familiar to us, we first use energy balance in large scale (Eq. 3), which has been introduced in Section 5-3. Note that \( \frac{dE}{dt} = 0 \) due to steady-flow assumption.

\[
\begin{align*}
[E]: \quad \frac{dE}{dt} &= \dot{m}_{\text{in}} \cdot (h + ke + pe)_{\text{in}} + \dot{Q}_{\text{in}} - \dot{m}_{\text{out}} \cdot (h + ke + pe)_{\text{out}} - W_{\text{out}} = 0 \\
\text{yields} \quad \frac{dE}{dt} &= \dot{m} \cdot [(h_{\text{in}} - h_{\text{out}}) + (ke_{\text{in}} - ke_{\text{out}}) + (pe_{\text{in}} - pe_{\text{out}})] + \dot{Q}_{\text{in}} - W_{\text{out}} = 0
\end{align*}
\]

Zooming in to a smaller scale to see energy change from inlet \( x \) to outlet \( x + dx \), we obtain Eq. 4.

\[
-[dh + d(ke) + d(pe)] + \delta q_{\text{in}} - \delta w_{\text{out}} = 0 \quad (\text{Eq. 4})
\]

where \( dh = d(h_{\text{out}} - h_{\text{in}}) \), \( d(ke) = d(ke_{\text{out}} - ke_{\text{in}}) \), \( d(pe) = d(pe_{\text{out}} - pe_{\text{in}}) \).

Note that we use \( d \) for properties and \( \delta \) for path functions. As we mentioned before, we do not have an expression for \( \delta q_{\text{in}} \), but we can get \( \delta q_{\text{int.rev.in}} \) by Eq. 1 (please see above).

\[
\begin{align*}
\delta w_{\text{int.rev.out}} &= \delta q_{\text{int.rev.in}} - dh - d(ke) - d(pe) \\
\delta w_{\text{int.rev.out}} &= T \cdot ds - dh - d(ke) - d(pe) \quad (\text{Eq. 5})
\end{align*}
\]

Recall that we have derived \( T \cdot ds \) equations in section 7-7, here we use the second \( T \cdot ds \) equation \( T \cdot ds = dh - v \cdot dP \) and combine it with Eq.5 yields Eq.6.

\[
\delta w_{\text{int.rev.out}} = -v \cdot dP - d(ke) - d(pe) \quad (\text{Eq. 6})
\]

This equation is derived in an open system (control volume), whereas Eq.7-21 & 7-22 in Section 7-7 is based on closed system (control mass). Also, the change of \( ke \) and \( pe \) is negligible in most turbines and compressors. After ignoring them and then integrating both side from state 1 (inlet) to state 2 (outlet), Eq. 7 in Section 7-10 can be derived.

\[
w_{\text{int.rev.out}} = -\int_1^2 v \cdot dP \quad \text{or} \quad w_{\text{int.rev.in}} = \int_1^2 v \cdot dP \quad (\text{Eq. 7})
\]

Eq. 7 is known as \textit{reversible work output from a single-inlet/single-outlet steady-flow device}.

Here are some comments for this equation. First, this equation can be only used in steady-flow devices that have single inlet and single outlet. Second, if \( dP > 0 \), we will need to input some work into the device, which makes sense because effort must be made to adding pressure to substances. Third, we know that liquids have much smaller specific volume than vapor \( (v_f \ll v_g) \), which means it is much easier to pump liquids than compress vapor. Last but not last, the equation can only be applied for an internally reversible system, which has no irreversibility such as friction, unrestrained expansion of a gas and so on (See Section 6-6 for detail).
4) Tips to improve your teaching skills

a. Use visual aids as much as possible. Writing on the board, using an overhead projector, presenting with power point or providing handouts are excellent ways to communicate with students. If students have difficulty understanding your pronunciation, they can read the information from the visual aid.

b. Organize your main ideas so that each recitation class has a beginning, a body and an end. A general outline consists of: introduction (tell the students what you are going to talk about); body (main contents); conclusion (remind them of the key points that you have mentioned).

c. Give students a basic outline of what you will cover in class. List key terms or difficult-to-spell words on the visual aid. Be sure to check and learn the correct pronunciation of special terms from readily available resources. Try to form a habit to point to the key term or word the first several times that you say it. By doing this, students can learn the pronunciation of the word and the meaning of the term.

d. Use transition words or phrases to let the students know when you’re moving to the next important point. For example, use phrases such as: “The second point I want to make is…” or “Now, let’s move to the next idea…” Summary words to indicate the end of a part may include: “In conclusion…” or “The important points to remember are…” These verbal markers help to keep the students’ attention focused as you move from one key idea to the next one.

e. Use plenty of examples to explain or demonstrate your main ideas. Students need examples in order to deepen the understanding of the material. Think about the activities and subjects that your students know about and use real life examples to illustrate your ideas. Make sure the students know you are giving examples by using phrases such as: “Let me give you an example…” or “To be more specific…” Whenever possible, use three-dimensional objects to demonstrate your main ideas.

f. Explain your jargon or field-specific vocabulary. Every discipline has unique terminology that is referred to as jargon. Make sure that you explain in simple words. Remember that you’re not trying to impress your students with your terminology—you want them to know what you know. Teach them the jargon in simple terms and refer back to the simple terms when they seem confused.

g. Ask students questions throughout your recitation class. Don’t wait until the end of your class to check if the students understood you. Pause at the end of each main idea and ask them a few questions to see if they can apply what you’ve taught them. Ask them to provide an example, to work out a sample problem or to supply some missing information.

h. Wait after you ask a question. Don’t expect students to respond immediately. Students need time to process your question, formulate an answer and then indicate their willingness to respond. So, after you ask them a question, wait at least 5-10 seconds for a response. If they don’t respond, then you might give a clue as to the correct answer or rephrase the question. Or, call on students to provide answers. Treat all answers with respect even if they are wrong. ("That's a good try, but...")

i. Encourage students to ask you for clarification if they don’t understand your pronunciation. Make students feel comfortable about asking you questions during the class. Say things such as: “Good question…” or “Who else has questions?” If students know that you are willing to help them, then they will be willing to help you if you make English errors as you teach.
5.3 Active Learning Workshop

How can you help students to learn effectively in your recitation class? Have you ever thought about drawbacks in traditional passive learning? Active learning is a good way to turn students into active protagonists from passive receptors and to improve classroom efficiency. Now is the best time to start to adapt active learning methods in your recitation class.

5.3.1 Workshop Outline

1) What is active learning and why
   a. Active learning involves providing opportunities for students to meaningfully talk and listen, write, read, and reflect on the content, ideas, issues, and concerns of an academic subject.
   b. Discuss about your experience
   c. Check yourself

2) Active learning strategies
   a. Basic strategies and skills
      • Minute paper
      • Think-pair-share
      • Cooperate group in class
      • Brainstorming
   b. How to apply the strategies in recitation classes
      • Before the class
      • During the class

5.3.2 Workshop Requirements & Preparation

1) Take your pen and a piece of paper
2) Bring several examples of passive learning and active learning
3) Think how to use active learning to help students
5.4 Practical Guide for Using Canvas

Canvas is the newly utilized learning management system in JI, which is designed to support teaching, learning and collaboration between teachers and students. The Practical Guide for Using Canvas workshop will equip students with basic functions they can utilize as teaching assistants. Meanwhile, some advanced functions will be introduced. Thus, it is a fundamental workshop for new TAs in JI, which helps to improve the working efficiency of new TAs.

5.4.1 Workshop Outline

1) Introduction of basic settings of Canvas
2) Learning how to set up course homepage
3) Learning basic operations: putting up announcements, uploading resources, assigning homework and importing grades for students
4) Introduction of advanced operations, such as assign groups, post tests and quizzes, etc.
5) Hands-on practice on your personal laptop
6) Giving feedback for the workshop

5.4.2 Workshop Requirements & Preparation

1) Please bring your laptops and take down some notes when necessary.
2) Please follow the steps of the TA mentor carefully during the workshop.
3) Please use “Canvas Training Workshop” tab on Canvas when you practice.
5.5 Guide for Exam Supervision

It is one of TA’s responsibilities to supervise the course exams. To strengthen the supervision and inspection of the exams, all TAs are required to attend this workshop. The outline is provided below.

1) Introduction to exam supervision process
   a. Before exam:
      • Arrive at least 15 minutes before the exam
      • Check Student ID card and arrange seats
      • Remind Examinees of materials to be put at the specified places with cell phones shut down
      • Write down exam time on the blackboard
      • Check the number of exam papers
   b. During exam:
      • Set mobile phones to vibration mode
      • Arrange examinee to check-in
      • Supervise exam and keep exam record
   c. After exam:
      • Confirm the number of collected papers
      • Fill in exam record form and sign
      • Return exam papers to instructor
      • Return exam record form to UEO

2) What should you do if you are unavailable to supervise

3) How to deal with special exam issues

4) How to report Honor Code violations happened during an exam

5) Proctors should strictly execute Shanghai Jiao Tong University Exam Regulations. If proctors find the examinees who violate the exam regulations, they should give some warnings to the examinees. If proctors have enough evidences to verify that the candidates cheated in the exam, they should report to the instructor and fill in “Exam Condition Record”. After checking with the instructor, proctors shall report the violation case to JI Honor Council promptly.

6) Learn from actual mistakes in previous semesters

7) Tips for proctors
   a. Reply the email 3 days before whether you are available for proctoring
   b. Complete exam record form during exams
   c. Confirm exam duration with instructor if there is inconsistency
   d. Count the collected exam papers when exam ends before let students leave exam room
5.6 Grading Issues on Engineering Courses

TAs in JI are also graders for assignments, exams, essays and reports. TAs’ grading is directly related to the final grades of students, which most students care a lot. To be a good grader is one of the basic requirements of a TA. How to become an excellent grader in different occasions? After taking this workshop, you will get the answer.

5.6.1 Workshop Outline

The workshop mainly covers 3 parts: objective grading, subjective grading, and cases study about Honor Code & TA Blacklist. In the first two parts, you can learn things about developing a rubric, the pitfalls of the normal rubric, principle of grading, and tips for grading. There will also be a case study included to teach you how to grade consistently. In the third part, we will show you some regulations about grading, basically things you should do and things you should not do. Two cases will be studied and we will discuss what we need to do when we face such situations.

5.6.2 Workshop Requirements & Preparation

Please bring this handbook to the workshop. TAs are recommended to finish grading “Answer of Student 1” (all materials in the next section) with respect to “Standard Answer” and give a final score of it before coming to the workshop. Grading “Answer of Student 2” is NOT required.

5.6.3 Workshop Handouts

<table>
<thead>
<tr>
<th>VV156 Homework Sample Rubric (11 points):</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Riemann zeta function is defined by:</td>
</tr>
<tr>
<td>[ \xi(x) = \sum_{n=1}^{\infty} \frac{1}{n^x} ]</td>
</tr>
<tr>
<td>and is used to study the distribution of prime numbers. What’s the domain of ( \xi )?</td>
</tr>
</tbody>
</table>

Standard Answer:

The domain is the set of \( x \) such that the series is convergence.

When \( x = 0 \), the series diverges.

When \( x < 0 \), \( \lim_{n \to \infty} \frac{1}{n^x} = \infty \), the series diverges.

When \( 0 < x < 1 \), \( \int_1^{\infty} n^{-x} dn = n^{1-x} \left|_1^{\infty} \right. \). Since \( 1 - x > 0 \), the improper integral diverges, thus the series diverges.

When \( x = 1 \), \( \int_1^{\infty} n^{-1} dn = \ln n \left|_1^{\infty} \right. \to \infty \). The series diverges.

When \( x > 1 \), \( \int_1^{\infty} n^{-x} dn = n^{1-x} \left|_1^{\infty} \right. \frac{1}{x-1} \). Hence the series converges.

Therefore, we conclude that the domain is \( x > 1 \).
Answer of Student 1:

When \( x = 0 \), easy to know that the series diverges.

When \( x < 0 \), \( \lim_{n \to \infty} \frac{1}{n^x} = \infty \), the series diverges.

When \( 0 < x < 1 \), we know from integral test that since \( 1 - x > 0 \), the improper integral diverges.

The series diverges.

When \( x = -1 \), we can also conclude that \( \xi(x) = 2 \). The series converges.

When \( x > 1 \), in the very similar way we can deduce that the series converges.

Therefore, we conclude that the domain is \( x \geq 1 \).

Answer of Student 2:

For \( x = 0 \), since all the terms in the series are positive, we can get \( \xi(x) = \sum_{n=1}^{\infty} \frac{1}{n^x} > \lim_{n \to \infty} \frac{1}{n^x} = \lim_{n \to \infty} n^{-x} \), which approaches infinity. The series diverges for \( x < 0 \).

For \( x < 0 \), \( \xi(x) = \sum_{n=1}^{\infty} \frac{1}{n^x} = \sum_{n=1}^{\infty} 1 \). The series diverges.

For \( 0 < x < 1 \), from integral test, we know that since \( 1 - x > 0 \), the improper integral diverges. Therefore, the original series diverges.

For \( x = -1 \), we can get \( \xi(x) = \sum_{n=1}^{\infty} \frac{1}{n^x} = \sum_{n=1}^{\infty} \frac{1}{n} = \lim_{n \to \infty} \frac{1}{n} = \lim_{n \to \infty} (\frac{1}{1} + \frac{1}{2} + \cdots + \frac{1}{n}) = \lim_{n \to \infty} (2 - \frac{1}{n}) = 2 \). The series converges.

For \( x > 1 \), also using the integral test we can get that the series converges.

Therefore, we conclude that the domain is \( x \geq 1 \).
5.7 Grading Issues on Humanity Courses

This workshop is required for all TAs working for humanity courses. It will prepare those TAs to be a qualified grader for humanity courses. The workshop is divided into two parts. One is regarding written assignments and the other is about behavior-based assignments. In the first part, by practicing some simple and short grading exercises, trainees will understand the importance of using rubric when grading written assignments of humanity courses. Other than rubric, several crucial concepts, such as consistency and fairness, are highly emphasized in this workshop. As for the second part, new TAs will read one sample rubric for group presentation to have a basic idea about how to help instructor to evaluate students’ presentation performance. At the end of the workshop, some cases of violation of ethics and professionalism will be reviewed and discussed.

5.7.1 Workshop Outline

1) The reason why TAs working for humanity courses are required to take this workshop

2) The way to grade written assignments
   a. Do some preparation in advance
   b. Stick to the rubric to grade
   c. Provide productive and specific feedback for students
   d. Quick review of MLA Format
   e. Other general requirements to abide by when grading written assignments

3) The way to grade behavior-based assignments
   a. Examples of behavior-based assignments
   b. General requirements for grading presentations
   c. Quick review of a sample rubric for presentation
   d. General requirements for grading participation

4) Tips and requirements to guarantee consistency

5) Case study

5.7.2 Workshop Requirements & Preparation

Briefly read the attached handouts and bring some specific questions.

5.7.3 Workshop Handouts

1) Sample A

Write one introductory paragraph about 60 words using the method “from broad to narrow”, which is especially suitable for exposition essays. The introductory paragraph should include: 1. general information about the broad topic, 2. thesis about the narrow topic, 3. plan of development in several perspectives. Point Value: 10 points

Example: Natural disasters are constant companions of mankind in human history and cause numerous bitter memories. Most of them are destructive and usually consume human properties and claim human lives. // The most striking one may be flood for its long duration, wide damage area and great difficulty for recovery. //
2) Sample B

Sports that provide communication among people all around the world have always been an important part of human’s life. People play sports often not only for healthy bodies, but also for better understanding, creative skills and fascinating entertainment.

The very sport where most amazing happen is the basketball, no matter it is shown in NBA on the TV or simply enjoyed by ourselves.

3) Rubrics

a. Sample rubric for article

<table>
<thead>
<tr>
<th>Rubric</th>
<th>Points 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STRUCTURE (ORGANIZATION) (Weighting 35%)</strong></td>
<td></td>
</tr>
<tr>
<td>1. Well structured and coherent (a. general information about the broad topic, b. thesis about the narrow topic, c. plan of development)</td>
<td>0</td>
</tr>
<tr>
<td>2. The paragraph follows the requirement of length (about 60 words)</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>CONTENT (Weighting 35%)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The topic is general and broad</td>
</tr>
<tr>
<td>2. The thesis is specific and concise</td>
</tr>
<tr>
<td>2. Plan of development in several aspects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>LANGUAGE USES (Weighting 30%)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Complete and concise</td>
</tr>
<tr>
<td>2. Word &amp; tense</td>
</tr>
<tr>
<td>3. Grammar</td>
</tr>
</tbody>
</table>

**Total**
b. Sample Rubric for Presentation

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>70-79 (C-/C+)</th>
<th>80-86 (B-/B)</th>
<th>87-92 (B+/A-)</th>
<th>93-100 (A/A+)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-verbal communication</strong></td>
<td>• Speakers are disconnected from the audience, making no eye contact; Speakers mostly have a faltering tone and quiet voice; Speakers seem disengaged from the material presented; Speakers do not appear as a cohesive group; single individuals being often distracted or bored; Timing is not respected.</td>
<td>• Speakers sporadically connect with the audience; Speakers are occasionally inaudible or hard to understand; Speakers are mostly engaged with the material presented; The majority of speakers appear as a cohesive group; Timing is slightly over or under requirements.</td>
<td>• Speakers mostly connect with the audience; Speakers are mostly clear and steady in their tone of voice; Speakers are consistently engaged with the material presented; Speakers appear as a cohesive group; Timing is respected, though Q&amp;A may exceed allotted time.</td>
<td>• Speakers consistently connect effectively with the audience; Speakers their voice and tone well to capture audience attention; Speakers’ engagement with the material presented is infectious; Speakers appear as a cohesive group, emanating respect and attention towards co-presenters; Timing is respected, including well-managed Q&amp;A section.</td>
</tr>
<tr>
<td><strong>Verbal Communication and Related Presentation Tools (Slides, questionnaires, use of the blackboard, and so on)</strong></td>
<td>• Language is often sloppy, unclear, or unintelligible; Speakers read a pre-written paper, with no emphasis on main points or keywords; Slides (if used) contain various types of spelling, syntax, and/or grammar mistakes.</td>
<td>• Language is mostly clear and intelligible; Speakers show inconsistencies in use of language, for ex. some reading scripts, others speaking confidently; Slides (if used) contain minor spelling, syntax, and/or grammar mistakes.</td>
<td>• Language is consistently clear and intelligible; Speakers clearly focus on keywords and main points; Slides (if used) have no spelling, syntax, and/or grammar mistakes.</td>
<td>• Language is sophisticated, clear, intelligible and impressive; Speakers clearly focus on keywords and main points, showing group coherence in linguistic choices.</td>
</tr>
<tr>
<td><strong>Content and Organizational Structure Research (if used)</strong></td>
<td>• The overall argument is weak, ungrounded, and/or unfocused.</td>
<td>• The overall argument shows good construction, but some gaps in evidence or development.</td>
<td>• The overall argument is solid, with good use of evidence.</td>
<td>• The overall argument is solid, with excellent use of evidence.</td>
</tr>
<tr>
<td><strong>Overall presentation effectiveness, Persuasiveness, Q&amp;A</strong></td>
<td>• Results/Conclusions of the presentation are not clear: audience is unsure what they’ve learned; Presentation’s illumination of its subject falls far short of Duhigg’s treatment of Starbucks; Movement between four parts of presentation flowed poorly with awkward disconnects.</td>
<td>• Results/Conclusions of the presentation are mostly clear: audience has learned about topic, but with gaps.</td>
<td>• Results/Conclusions of the presentation are clear: audience has learned about topic with few gaps</td>
<td>• Results/Conclusions of the presentation are clear: audience has learned about topic and has seen its relevance to a broader context</td>
</tr>
</tbody>
</table>

Movement between four parts of presentation flowed somewhat well but with “loose ends”

Presentation’s illumination of its subject compares well with Duhigg’s treatment of Starbucks

Movement between four parts of presentation flowed well

Presentation’s illumination of its subject well exceeds Duhigg’s treatment of Starbucks

Movement between four parts of presentation flowed so well they should be a relay team
5.8 Online Discussion Forum

TAs can earn up to 2.0 training hour by posting in the discussion forum on topics provided in the “TA Training Materials” folder under “Resources” on “TA Group” site on Canvas. It can be a 400-word or above reflection essay or reply to two or more postings by other TAs on the same topic with “value-added” content. Actual hours awarded will be based on the content of the posting, as well as the quality of writing. Detail instructions will be posted on “TA Group” site on Canvas.

5.9 Midterm Student Feedback

All TAs who hold recitations/labs may request a midterm student feedback from CLT-JI to gain useful feedback of your teaching performance and generally 2.0 training hours towards TA certification. You will also benefit from analyses and suggestions from students and observing mentor on your strengths, weakness, and difficulties of your teaching and potential areas for improvement. Your requests will be accepted within one week after the announcement is released on TA Group site on Canvas. The procedure is listed below:

1) Two TA peer mentors will attend recitation classes / exam review classes / labs hold by TA, and then conduct midterm class evaluations in the absence of the TA. They will distribute and collect MSF evaluation forms from enough number of students enrolled in the recitation class to get meaningful feedback. The overall score on the MSF should be at least “Satisfactory Plus”.

2) Before conducting MSF, TA conducts recitation class in the presence of the mentors. Then at the end of the recitation/lab session the mentors collect the MSF and write evaluation reports including students’ feedback and their assessment of the TA with some suggestions and recommendations. The mentors’ evaluation should be “Satisfactory Plus” or above.

3) The TA must submit his/her own recitation section evaluation including remarks on his/her performance, students’ feedback, improvements to make and recommendations.

5.10 Case Study

Everyone taking on the role as TA for the first time is embarking on a new journey. We hope your journey will be fascinating and rewarding. To help you on your way, CLT-JI offers this training session for you to become aware of some possible situations you may encounter in your job so that you can have a chance to think about ways to handle them ahead of time.

5.10.1 Procedure

All TAs will be divided into groups by the facilitator. Each group will be assigned one scenario (listed in Section 5.10.3) to do the role-play. The audience are required to provide comments or questions regarding the role-play. At the end of each role-play, a faculty advisor will make the summary and offer some suggestions. Afterwards, all TA groups will participate in the debate of case scenario #5.

1) After 30 minutes’ discussion, each team should use at most 7 minutes to give a short play on the case, which helps the audience to better understand the case.

2) Then, each team has 3 minutes to deliver a short presentation analyzing the case. The structure of the presentation should be as follows:

   a. Please describe the major problem to be resolved in this scenario, including the nature of the problem, i.e. ethical or not-related to ethics, urgent or on-going, etc.
b. Explain the TA’s role in resolving the case, including whether the TA is solely responsible to resolve the case or someone else should be consulted / involved.

c. Could or should the TAs satisfy all the parties involved in this case, including him/herself?

d. Please describe your resolution(s) to this case, and explain briefly.

e. What are some consequences of your resolution(s) to the individuals involved in the case? How about to others not directly involved (i.e. other students / TAs, instructor, and the JI)?

3) At the end of each role play and presentation, a faculty advisor will comment on the team performance, and offer some feasible suggestions.

4) All groups will participate in the debate of case scenario #5 for **20 minutes**. Groups with case 1 and 2 will stand on the affirmative side while groups with case 3 and 4 will be on the opposition side.

5) Facilitator will pose a question and call for an answer. All groups may respond by raising your hands: first card “up”, first speak! Each answer or response is limited to **2 minutes**.

6) Facilitator calls for challenges or comments to the above answer from other groups (again, first card “up”, first speak.)

7) Facilitator may continue to pose another question for teams to debate.

8) When the case has been satisfactorily resolved by the teams or the debate time is out, the facilitator calls an end to the session and asks for faculty comments to conclude the session.

**5.10.2 Instructions for Group Discussions**

Every team will have 30 minutes to discuss and find best solution to the assigned cases. Each team has 10 minutes in total for role play and presentation. Use 7 minutes to give a short role-play on the case to help the audience understand the scenario and use the other 3 minutes to analyze the case based on the required structure.

1) Please describe the major problem in this scenario, including the nature of the problem, ethical problem or professional problem, debatable or non-debatable, etc.

2) Explain the TA’s role in the scenario, i.e. whether the TA is the only one responsible to find out the solution or someone else should be consulted / involved.

3) Could or should the TAs satisfy all the parties involved in this case, including him/herself?

4) Describe the solution to this scenario, and explain briefly.

5) What are the consequences of the solution to the individuals involved in the case?

6) What are the consequences of the solution to others that are not directly involved (i.e. other students / TAs, instructors and JI)?

A judging panel consists of experienced TAs will evaluate the performance of every team according to the rubric in Section 5.10.4. Teams receiving highest scores from the judging panel will be awarded with prizes after the case study session.
5.10.3 Scenario Descriptions

1) Cases for Role Play and Presentation

a. Case 1 – “Establish a good teaching relationship”

During the recitation class, there is nearly no response when you want to interact with the students. Students always keep listening quietly, which makes you feel confused whether they understand the contents or not. Furthermore, few students come to your office hour proactively. It bothers you that there is little or no interaction between you and the students both in class and after class. As a result, you cannot provide the help they need in time.

b. Case 2 – “Questions by message, QQ or email”

It is TA’s responsibility to help students eliminate their confusion about the course material. However, you find that students do not always go to office hour for help. Instead, they prefer to contact you by message, QQ or email. After several experiences of contacting students electronically, you find that it is not easy and clear enough to explain complex problems via text. For one thing, you need to spend a lot of time in text organization; for another thing, students may not understand the explanation well. The above condition really brings you many troubles. However, rejecting to answering students’ problems by message, QQ or email may make them think that you are not willing to help them.

c. Case 3 – “Sorry, I cannot understand your oral English”

During the recitation class, many students complained about your poor oral English and asked you to speak Chinese. You realized that it was a problem and in order to promote the teaching efficiency, you started to speak Chinese for the remaining class. However, an international student came in and cannot understand Chinese at all. As a result, the student reported the case to CLT. What would you do to solve the problem?

d. Case 4 – “Please consider my unavoidable circumstances”

A student has been very diligent all semester long. He submitted homework on time, and received above average scores on all assignments and the midterm exam. You received this email after final exam grade was posted (but before the course grade is finalized): “Excuse me; I just saw that my final exam score is 61, which is below the class average. Frankly speaking, I was having a cold on the exam day with a fever and headache, which made it difficult for me to think clearly. Since I really want to apply for the dual degree program, this grade is extremely important for me. It may determine, to some extent, my life and career in the future. Would you please consider assigning a higher course grade for me based on previous work?”

2) Case for Debate Session (Case 5) – “Can TA date with students?”

a. Affirmative side’s opinion – Yes. TA can date with students.

b. Opposite side’s opinion – No. TA cannot date with students.
5.10.4 Evaluation Rubric for Case Study Team Competition

Each member of the judging panel will submit five forms corresponding to the five team role-plays and presentations.

**Rating Guide:** 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree

<table>
<thead>
<tr>
<th>Case No.: _________</th>
<th>Team No.: ____</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>All members actively participate during group discussion time.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The team stayed on task during group discussion and listen carefully to other teams.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The team demonstrated the case fully and interestingly in the role play.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The team provided clear and reasonable solutions in the presentation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The team managed the allotted time effectively during role play and presentation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The team contributed convincing answers during the debate.</td>
<td></td>
</tr>
</tbody>
</table>

5.10.5 Reference Readings

1) Case 1: How to Establish a Good Teaching Relationship with Students

   a. Make a concerted effort to maintain eye contact with all students as much as possible while teaching.

   b. Either smile or use other body language, such as approaching students when speaking and listening, that conveys respect and friendliness toward students.

      • Learn all names early in the semester and use them in class. Learning names makes a big difference to students. But remembering lots of new names, particularly those from a different language, can be tricky. Here are some suggestions to help attach names to people:

      • Place a small sign with students’ names on their desks or tables at the start of the semester;

      • Use the Roster to take attendance or grade student participation;

      • Gather information from individuals about their relevant background and goals in your course (through an in-class survey or partner interview, for example).

      • Names have so many language origins that their pronunciation is often unpredictable; it can be useful to go over your roster with a more experienced TA before the first or second class. It is equally important for students to learn to say and remember your name, so spending some time on this on the first day is valuable.
c. Use icebreakers early in the semester to foster a positive learning community where students feel socially secure. For example, on the first day of class, you might have students interview a partner to find out and report back to the class something that the person thinks one wouldn’t guess by looking at them. If you prefer a more contextualized icebreaker, you could, for example, give students a somewhat mysterious diagram or image (from your course material) to interpret and have them write a caption for it in pairs, type these into a Google doc, and then hand-vote on the best caption.

d. Send an online survey to students in week 2 of the term, asking “What aspects of this section are most helpful to you, and why?” and “What specific suggestions do you have for improving this section?” Summarize main points to share with students, so they will see that (a) you care about their learning and (b) what you do and don’t have the power to adjust.

e. Set up a reason for every student to come to your office hours within the first three weeks of the term. For example, you might have them come to fill out a learning goals guided questionnaire, to discuss their first quiz, exam, or paper, or to talk about ideas for an end-of-term project. Use these meetings as a chance to get to know students and show that you care about them as individuals: ask where students are from, what they are studying, what other activities they are involved in, and similar questions.

2) Case 2: TA’s Responsibility

a. Speak with your students on the first day about what they can expect from you. You might consider your turn-around time on responding to emails and on handing back graded assignments, your office hour availability, what kinds of help you can offer with studying or homework.

b. Encourage students to go to office hours. Tell them communicating face to face is much more efficient both to TAs and students. Let the students know the formal way allowed to contact you.

c. Discuss expectations of TAs for a particular course with other TAs experienced in teaching that course with the same faculty supervisor. There are several TA Mentors in Center for Learning and Teaching of the Joint Institute (CLT-JI). These experienced mentors may be able to tell you where students typically have problems in the course.

3) Case 3: The JI Requirement of Teaching in English

Since you are most likely to be a non-native speaker of English, you may think that your biggest problem is the language. Likewise, your students may be concerned, fearing that a TA’s different English will hinder their ability to succeed in the course. An easy way out is to cheat and resort to communicating in Chinese. However, this short-changes the value of a JI education and undermines the JI spirit: “Strive hard and never give up.” Also, JI is endeavoring to significantly increase the percentage of degree-seeking international students and there will be more and more students who only speak English. Instead of reasoning a way out of this requirement for all TAs to hold recitation classes in English, you might as well face the challenge and work hard to overcome it. Therefore, we suggest you:

Make every effort you can to improve your English. Specifically, make sure that you speak English as much as possible, every day. Listen to radio and watch TV broadcasts in English. Try to imitate the speech rate (fast or slow speed) and intonation patterns (high and low pitch) of the
speakers. Notice their hand gestures and facial expressions. Read text chapters or other materials in English out loud. Practice speaking in English with your roommates, lab partners, and especially your instructor.

You may need to improve your spoken English, especially if you learned to say a sound or word incorrectly for many years. It may take many hours of practice to retrain your mind and mouth muscles to say the word correctly. But, with diligent practice, it can be done. In particular, practice a list of keywords as preparation for teaching a class. A keyword is defined as a word that you will be using multiple times during your teaching to explain your main ideas. The idea is this: if you say the keywords many times throughout your lesson incorrectly, your students will not be able to understand your main ideas. Through correct practice of the individual sound pronunciation, number of syllables and syllable stress in a keyword, your students are more likely to understand the main ideas in your lesson.

In addition to your efforts to become comfortable in English, openly acknowledge on the first day of class that you and your students will have to work at communicating, and that it may take everyone some time to understand different ways of speaking English. Ask them to let you know if they do not understand something. Tell them you may ask them to repeat slowly, rephrase, or explain what they have said, to ensure that you understand them. Do not pretend to understand when you don’t—and this can get you into awkward situations! An appropriate response is, “I don’t know. Does anyone have any ideas?” You can also say you will find out and discuss it in the next class.

4) Case 4: Eager Parents / Non-responsive Students / Unfortunate Circumstances

Some TAs working for the JI reported incidents when parents of their students contacted them directly to request help or even special favors for their sons or daughters. Sometimes it is because these students are not doing well, such as at the point of failing the course. To these eager and concerned parents, who else could best help their students succeed in a difficult course other than the TA of the course?

In contrast to the eagerness of parents, certain students seem to care little about course work. They seldom attend class or recitation. They do not check CANVAS regularly for announcements and course materials. When they come to class, they are always late and miss the announcements at the beginning. They do not respond to email alerts or invitations to come to meet with you during office hours. These students are very likely to fail the course. As a TA with limited time and efforts, what could you do?

Then there are the students who are generally hardworking, they attend classes regularly, take detailed notes and carefully read all the assigned readings. But they may receive disappointing exam scores or assignment grades due to some seemingly extraneous circumstances beyond their control. How can you help them get through these frustrations? Here are some suggestions:

a. In order to ensure fairness and avoid conflicts, it is essential that you know all grading policies and follow them consistently. As a TA, you are assisting the course instructor in implementing his or her course policy. This is especially important when it comes to grading student work and grade change requests. Do not be tempted to cross the line and misuse your power with regard to grades.

b. You should communicate with the instructor at the start of the semester concerning grading issues such as the following:
• How each kind of assignment or exam will be graded (e.g., criteria; holistic grading vs. point systems; using a “curve” vs. absolute grades; and penalties for lateness, failure to cite sources, etc.).

• General guidelines for writing comments on the students’ work.

• The procedure for responding to students’ concerns about grades. Typically, the course instructor handles all complaints about grades.

• Course policies on “re-grading” exams and re-writing papers.

c. Never contradict the information that the instructor gives the students or suggest that you do not agree with the grade assigned by the instructor.

TAs are often responsible for two potentially conflicting tasks: they help students with homework and exam preparation, and later grade / assign scores to the same work. They must therefore be conscientious to not “simply give away answers” but make sure the help they render to the students is enabling the students to solve problems on their own.

The same potential conflicts of interest apply when a TA has any special relationships with students in his or her class, such as dating and/or tutoring a student privately for money. It is best to avoid the appearance of favoring any student over the others and refrain from entering into special relationships. If a special relationship is already in existence, the TA should refer the student to other TAs of the same course and consult the course instructor for further actions.

The key to help non-responsive and hard-to-reach students is to do it as early as possible in the semester. Keep your eyes open and take note of those who enter class late, are frequently absent from attendance records, and submit assignments late, etc. At the latest you should identify them right after grading a mid-term exam or a major assignment, as they are often those who perform poorly on these. Try to contact each of them at least once or twice to offer help and find out if any particular difficulties are distracting them.

Alert the instructor of issues, behaviors and attitudes that put these students at-risk in failing the course. Also, you should alert the student counselors (room 321) of all at-risk cases. Early and proactive intervention is crucial, and student counselors have more time and expertise than you can afford to support these students.

Above all, after you have fulfilled your duties as a TA, be at peace about the situation, regardless whether or not a student responds to your genuine care and mend his or her ways.

Note: The above cases are compiled from experiences described by JI TAs and instructor. Reference texts adapted from materials written by Center for Research on Learning and Teaching in University of Michigan, Eberly Center for Teaching Excellence in Carnegie Mellon University and Teaching Center in Washington University in St. Louis.
6. Teaching Assistant Award Policy

6.1 Description

TAs are to be honored each year at the end of the spring semester for their outstanding work during the preceding February-December timeframe (spring-summer-fall semesters of the same year). The items of TA Awards to be set up are in the following list.

1) Outstanding Teaching Assistant Award (5 quota, 1000 RMB cash award & a plaque)
2) Excellent Teaching Assistant Award (10 quota, a plaque)
3) Outstanding Teaching Assistant Group Award (2 quota, plaques)
4) Outstanding Teaching Assistant Nominee (15% extra bonus award of TA stipend)

Generally, category No.4 requires no application and the award number is based on the TA’s job performance rating or score. The extra bonus will go to the awardees’ bank account directly. The award in the first 3 categories will consist of a suitable plaque, to be presented at the annual summer TA orientation conference.

6.2 Eligibility

Any student, who has served as a TA for the UM-SJTU Joint Institute during the preceding February-December timeframe with

1) at least “Basic TA Certificate” and
2) got “Outstanding” rating in the TA Performance Evaluation at the end of each semester,

will be honored as Outstanding Teaching Assistant Nominee (see Section 6.1) automatically and can further apply for the first two awards in Section 6.1. Generally, the top five applicants will be granted Outstanding Teaching Assistant Award and the following ten will be granted Excellent Teaching Assistant Award.

Any team, in which every member serves in the same course and gets at least “Basic TA Certificate” and “Excellent” rating, can apply for Outstanding Teaching Assistant Group Award in Section 6.1. The award is not restricted to UM-SJTU students.

6.3 Selection Criteria

Criteria for selection are based on individual judgment, but the following are particularly relevant:

1) Demonstrated initiatives in helping students learn and develop
2) Willingness to follow directions
3) Reliability and professionalism
4) Effort beyond requirements and expectations
5) Dedication to enhancing learning experience for all students
6) Students, faculty and related staff’s evaluations
6.4 Application Materials

The TAs will be informed their job rating and the applicant(s) must submit the following supporting materials to ji-clt@sjtu.edu.cn for Award Selection Committee’s reference and judgment before Mar. 31 of each year. The following section lists the required application materials.

1) Outstanding TA Award

a. **TA Award Nominee Statement Form** about how to employ what you learnt from training Center for Learning and Teaching (CLT) to your TA work; how to deal with the problems/difficulties/emergencies during your TA service; what you learnt from your TA experience; what aspects do you think should be improved next time; and any other aspects related with your TA work, (it is suggested to include but not restricted to the above questions)

b. **TA Award Recommendation Forms** from the employing instructor (sent to ji-clt@sjtu.edu.cn via instructors’ email account),

c. **TA Award Recommendation Forms** from the student(s) in the class the nominee served (sent to ji-clt@sjtu.edu.cn via students’ SJTU email account),

d. **The TA Certificate(s)** you got (a photo for the original copy),

e. **Other Certificates and Awards** you got (List and scanned copies in a pdf or word file).

2) Outstanding TA Group Award

a. **TA Award Nominee Statement Form** about your team/individual work,

b. **TA Award Recommendation Forms** about your team/individual work from the employing instructor (sent to ji-clt@sjtu.edu.cn via instructors’ email account),

c. **TA Award Recommendation Forms** from the student(s) in the class the nominee served (sent to ji-clt@sjtu.edu.cn via students’ SJTU email account), one copy or more which can cover each individual in the team,

d. **The TA Certificate(s)** of each individual (a photo for the original copies),

e. **Other Certificates and Awards** each individual got (List and scanned copies in a pdf file).

The applicants for group award should select a group leader to submit the material. The Award Selection Committee will combine the scores of TA evaluation and application materials together, and make the final awarding decision.

6.5 Committee Membership Selection

1) Four faculty members

2) One staff member

3) Three students (one TA peer mentor from CLT & two student representatives)

4) Nominations for committee membership will be made by the CLT director to the UM-SJTU Executive Dean, who will appoint the final committee members in consultation with the TA program director. The Selection Committee will submit the final award decision to CLT director and UM-SJTU Executive Dean no later than May 1 of each year.
Appendix A. TA Training Record

The following training activity tables in Appendix A.3 and A.4 are designed for you to keep track of the CLT-JI training sessions for the Basic/Advanced Teaching Assistant Certificate. By carefully documenting all the activities you have completed, you will be able to submit this record as proof of having fulfilled the TA training requirement. You may then apply for teaching certificates as stated in Section 4.2.

A.1 Instructions

Please follow the steps listed below to get your TA Certificate verified and completed.

1) Fill your personal information (name in Chinese, if applicable) in Appendix A.2.

2) List up to five of the most recent TA jobs you have held at the JI and indicate whether you need to hold recitation and/or lab classes, starting with the current position. Please keep job rating blank.

3) For every successfully completed TA training program, record the name of the program facilitator, the date of completion and ask the program facilitator to stamp and/or sign under the “verification signature / stamp” column.

4) If a training activity is an online forum or independent project, enter the title of the forum or project and the assigned training hours to that activity. Ask the program facilitator to sign the entry when you have completed the activity.

5) After fulfilling the required training hours in Section 4.2, please fill in the “Total Hours Completed” blank and send the scanned copy of Appendix A.2, A.3 and A.4 with title of “Basic (or Advanced) + Course Code + Name + Student ID” (e.g. Basic + VX102 + WANG Xiaoming + 51337090000) to ji-clt@sjtu.edu.cn to verify with CLT coordinator during the released service time on TA Group site on Canvas.

6) CLT-JI will then check your performance evaluation and inform you the job rating at the end of the semester. Once all the assigned TA job responsibilities and required job rating in Section 4.2 have been accomplished, you may then receive the corresponding teaching assistant certificates.

A.2 TA Working Record

<table>
<thead>
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<th>Course Code</th>
<th>Semester / Year</th>
<th>Instructor</th>
<th>RCs (write Y/N)</th>
<th>Labs (write Y/N)</th>
<th>Job Rating</th>
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TA Name: ___________________________ Student ID: ___________________________

Cell phone No.: ___________________________ E-mail: ___________________________
### A.3 Training Record for Basic Teaching Assistant Certificate

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<tr>
<th>Training Program</th>
<th>Category</th>
<th>Hours</th>
<th>Program Facilitator</th>
<th>Date</th>
<th>Verification Signature / Stamp</th>
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<tbody>
<tr>
<td>Opening Overview &amp; Intro. to TA Job Requirements</td>
<td>Required for All</td>
<td>0.5</td>
<td>WANG Yue, SHEN Li</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty Panel &amp; Award Ceremony</td>
<td>Required for All</td>
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</tr>
<tr>
<td>Case Study &amp; Awards Session</td>
<td>Required for All</td>
<td>2.0</td>
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<tr>
<td>Practical Guide for Using Canvas</td>
<td>Required for All</td>
<td>1.0</td>
<td>WANG Yue, SHEN Li</td>
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<td></td>
</tr>
<tr>
<td>Guide for Exam Supervision</td>
<td>Required for All</td>
<td>0.5</td>
<td>XU Leilei</td>
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<tr>
<td>Grading Issues on Humanity Courses</td>
<td>Required for Engineering Courses TAs</td>
<td>1.0</td>
<td>XIA Dongqing, ZHANG Zherui</td>
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<tr>
<td>Grading Issues on Engineering Courses</td>
<td>Required for Humanity Courses TAs</td>
<td>1.0</td>
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<tr>
<td>Practice Teaching Workshop</td>
<td>Required for Recitation TAs</td>
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<tr>
<td>Teaching Strategies – Active Learning</td>
<td>Required for Recitation TAs</td>
<td>1.5</td>
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<tr>
<td>Teaching Labs &amp; Lab Safety</td>
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<td>Online Discussion Forum (2h Max)</td>
<td>Upon Request</td>
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**Total Hours Completed:** __________  **Verification Date:** __________  **Certificate No.:** __________
### A.4 Training Record for Advanced Teaching Assistant Certificate

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<th>Training Program</th>
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<td>Basic TA Certificate</td>
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<td>Transferrable Training Hours from Basic TA Certificate</td>
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<td>Midterm Student Feedback (6h Max)</td>
<td>At Least 2 Hours Required</td>
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<td><strong>Volunteering Services</strong></td>
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<td>TA Conference Preparation (3h Max)</td>
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<td>TA Conference Assistance (3h Max)</td>
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<td>TA Conference Documentation (3h Max)</td>
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<td><strong>Mentoring Services</strong></td>
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<td>TA Conference Host / Hostess</td>
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<td>Overview of the TA Training Programs</td>
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<td>Introduction to TA Job Responsibilities</td>
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<td>Facilitator / Judge Panel in Case Study</td>
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<td>Practical Guide for Using Canvas</td>
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<td>Grading Issues on Engineering / Humanity Courses</td>
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**Total Hours Completed:** ____________  **Verification Date:** ____________  **Certificate No.:** ____________
# Appendix B. Contact Information

The following table lists the contact information for responsible person regrading TA works. TAs are welcomed to send e-mail and ask for assistance.

<table>
<thead>
<tr>
<th>Name</th>
<th>Job</th>
<th>Responsibilities</th>
<th>E-mail Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. ZHAO Wenfang</td>
<td>UEO Academic Coordinator</td>
<td>Teaching Affairs</td>
<td><a href="mailto:wenfang.zhao@sjtu.edu.cn">wenfang.zhao@sjtu.edu.cn</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>TA Evaluation &amp; TA Awards</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>TA Payment</td>
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<tr>
<td></td>
<td>CLT-JI Coordinator</td>
<td>TA Mentor Recruitment</td>
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<td></td>
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<td>TA Training Hour Verification</td>
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<td>TA Certificate</td>
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</tr>
<tr>
<td>Ms. ZHANG Yuanyuan</td>
<td>UEO Academic Coordinator</td>
<td>TA Sample Work</td>
<td><a href="mailto:zhangyuanyuan@sjtu.edu.cn">zhangyuanyuan@sjtu.edu.cn</a></td>
</tr>
<tr>
<td>Ms. XU Leilei</td>
<td>UEO Academic Coordinator</td>
<td>Exam Supervision</td>
<td><a href="mailto:leilei.xu@sjtu.edu.cn">leilei.xu@sjtu.edu.cn</a></td>
</tr>
<tr>
<td>Ms. ZHU Caifeng</td>
<td>UEO Academic Coordinator</td>
<td>TA Recruitment</td>
<td><a href="mailto:ji-ueo@sjtu.edu.cn">ji-ueo@sjtu.edu.cn</a></td>
</tr>
<tr>
<td>Mr. HUANG Dengpan</td>
<td>IT Engineer</td>
<td>IT Support</td>
<td><a href="mailto:ji-it@sjtu.edu.cn">ji-it@sjtu.edu.cn</a></td>
</tr>
<tr>
<td>Mr. SHEN Li</td>
<td>CLT-JI Chief TA Mentor</td>
<td>Suggestions to TA Job</td>
<td><a href="mailto:ji-tasc@sjtu.edu.cn">ji-tasc@sjtu.edu.cn</a></td>
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<tr>
<td></td>
<td></td>
<td>TA Mentor Team Leader</td>
<td><a href="mailto:good025@sjtu.edu.cn">good025@sjtu.edu.cn</a></td>
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<td>Canvas Training</td>
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<tr>
<td>Ms. WANG Yue</td>
<td>CLT-JI TA Mentor</td>
<td>Canvas Training</td>
<td><a href="mailto:beibeij409@sjtu.edu.cn">beibeij409@sjtu.edu.cn</a></td>
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<tr>
<td>Mr. LIN Yukai</td>
<td>CLT-JI TA Mentor</td>
<td>Lab Safety</td>
<td><a href="mailto:linyukai@sjtu.edu.cn">linyukai@sjtu.edu.cn</a></td>
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<td>Ms. XIA Dongqing</td>
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<td>Humanity Course Grading</td>
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<td>CLT-JI TA Mentor</td>
<td>Online Discussion Forum</td>
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<tr>
<td>Mr. XUE Tianju</td>
<td>CLT-JI TA Mentor</td>
<td>Engineering Course Grading</td>
<td><a href="mailto:tianju.xue@gmail.com">tianju.xue@gmail.com</a></td>
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<tr>
<td>Ms. ZHENG Huan</td>
<td>CLT-JI TA Mentor</td>
<td>Engineering Course Grading</td>
<td><a href="mailto:intro_h@sjtu.edu.cn">intro_h@sjtu.edu.cn</a></td>
</tr>
<tr>
<td>Mr. DU Yipai</td>
<td>CLT-JI TA Mentor</td>
<td>Active Learning</td>
<td><a href="mailto:duyipai@sjtu.edu.cn">duyipai@sjtu.edu.cn</a></td>
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<tr>
<td>Ms. LI Yingyu</td>
<td>CLT-JI TA Mentor</td>
<td>Active Learning</td>
<td><a href="mailto:li_yingyu@sjtu.edu.cn">li_yingyu@sjtu.edu.cn</a></td>
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Appendix C. Bios of TA Mentor Team in Summer 2017

Chief Teaching Assistant Mentor – SHEN Li

Mr. SHEN Li received his B.S.M.E. degree in 2015 from UM-SJTU Joint Institute and is now continue studying in JI as a graduate student majoring in Mechanical Engineering. He got his first TA job in Summer 2014 and has been serving as the TA for VM235 (Thermodynamics), VM433 (Advanced Energy Solutions) and VC211 (Chemistry Lab) courses for a total of ten times in the past three years. Shen’s capability of conveying knowledge and his responsibility for TA jobs have been appreciated by many Mechanical Engineering students from year to year, and he is thus awarded as “2015 Outstanding Teaching Assistant”. Besides fulfilling his TA jobs with high quality, he is also dedicated in building our TA teams and modifying our TA training program. Shen started his TA Peer Mentor job in Fall 2014 and is now holding three workshops in CLT. His “TA Job Description and Requirements Workshop” combines TA policies with his abundant experience and allows new TAs to get basic information of their jobs, his “Practical Guide for Using Canvas Workshop” illustrates functionality of the most important course management system in JI, and his “Practice Teaching Workshop” shares his expertise in holding recitation classes and delivering knowledge to the students. His enthusiasm in TA and TA mentoring job makes him an excellent leader for the TA mentors team.

Teaching Assistant Mentor – DU Yipai

Mr. DU Yipai is a junior student majoring in Electrical and Computer Engineering. He dedicatedly served as TA for Dr. Liu Jing in VV156 (Applied Calculus II), VV255 (Applied Calculus III) and VV256 (Applied Honors Calculus IV). Du would like to work for other engineering courses or even humanity courses in the future. New TAs may find it challenging to keep the balance between the work and study, and Du suggests that TAs make good schedules to deal with time pressure. In the past few semesters, Du finds it really enjoyable to help with other students’ study and he values the job very much. Du is now a facilitator of Case Study section in TA Orientation Conference and he holds “Active Learning Workshop” and “Practice Teaching Workshop” as well. Having taught plenty of recitation classes, Du is expert at planning and conducting a recitation class and he welcomes new TAs to have discussions regarding teaching strategies. He hopes all new TAs will enjoy their teaching experience in this semester.
Teaching Assistant Mentor – LI Yingyu

Ms. LI Yingyu is now a junior ECE student. She took her first TA job in Summer 2016 and she worked as TA for VP141 and VP241 (Physics Laboratory) in both Summer and Fall semester in 2016. Joining Center for Learning and Teaching of the Joint Institute (CLT-JI) in Fall 2016, she has held workshops of “Active Learning”, “Practice Teaching” and “Grading Issues on Engineering Courses” for new TAs. Li believes that a qualified TA should always get well prepared and keep learning. Preparation, from Li’s perspective, not only concerns academics, but English proficiency, coordination skills, and time arrangement skills are also essential. Li recommends that TAs should keep enough time for the job so that they can be more patient with the students. One can never know everything before starting, TAs are bound to encounter problems and challenges. Li encourages every new TA to be confident and enjoy the job.

Teaching Assistant Mentor – LIN Yukai

Mr. LIN Yukai is a senior student majoring mechanical engineering and he is an experienced teaching assistant mentor in Center for Learning and Teaching of the Joint Institute. Lin has worked as TA for three courses including VC211 (Chemistry Laboratory), VG100 (Introduction to Engineering) and VM250 (Design and Manufacturing I). As a TA Mentor, Lin holds three training workshops for newly recruited TAs. His “Grading Issues on Engineering Courses Workshop” prepares TAs in engineering courses to be a grader in different scenarios. “Teaching Labs and Lab Safety Workshop” trains new TAs to be qualified to hold a lab session and emphasizes the importance of safety, which is the most important point in holding a lab. “Practice Teaching Workshop” illustrates several effective teaching strategies, which can greatly help new TAs when they teach students. TAs in JI works as a team rather than an isolated force. Lin suggests that all TAs should be professional in work, be confident to themselves and be reliable to students, their instructors and colleagues. He sincerely hopes that all TAs can enjoy the job.
Ms. WANG Yue is currently working as Teaching Assistant Mentor in Center for Learning and Teaching. She got her first TA job in Spring 2015 for VC211 (Chemistry Lab) and started her TA Mentor job in Summer 2015. She is one of the facilitators of “Practical Guide for Using Canvas Workshop”, which introduces the basic functionality of the Canvas system. She abides by TA is not only a job but a kind of responsibility. She hopes all the TAs can be impartial for every score they grade, be professional for every answer they give, be cooperative for every TA they work with, and be communicative for every instructor they serve. She wishes to hear from suggestions to TAs and provide necessary help to them.

Ms. WANG Zhiyu is a junior student majoring in Mechanical Engineering and she is a TA Mentor in charge of “Teaching Labs & Beyond Workshop”. Wang is fond of helping others. Getting the first job as teaching assistant in her junior year, Wang finds that working as TA a great experience. She values the job because responsibility, efficiency and patience are combined together in the job. Furthermore, she thinks that the job provides many chances to communicate with the instructor in which she can acquire some other knowledge and skills. Wang suggests that TAs seize the opportunity and enjoy the experience as TA and she believes that they will explore and develop themselves from the job.
Teaching Assistant Mentor – XIA Dongqing

Ms. XIA Dongqing is a senior student in JI, majoring in Electrical and Computer Engineering. She has been a teaching assistant since she was a sophomore and she has worked as a TA in 6 different courses including humanity courses and core elective courses in her major. She joined Center for Learning and Teaching of the Joint Institute (CLT-JI) and became a TA Mentor in her junior year. Xia believes that the coolest thing about being a TA and a TA mentor is that a TA can have the opportunity to stand beside the instructor and help others to learn more since being a TA means he or she has the heart to share knowledge or skills related to the course. Xia values the job much as receiving positive evaluations from both instructors and students towards her dedication and enthusiasm provides her with a great sense of self-achievement. Meanwhile, working as TA and TA Mentor not only improves her communication skills, but also deepens her understanding of professionalism. Xia strongly encourages those who have interests to become a TA or a TA mentor to submit the application and have a try. Once those new TAs follow the guidance of CLT-JI and fulfill their responsibilities, Xia holds the firm belief that they will enjoy the same happiness out from sharing and teaching.

Teaching Assistant Mentor – XUE Tianju

Mr. XUE Tianju is now working as Teaching Assistant Mentor in Center for Learning and Teaching of the Joint Institute (CLT-JI). He was one of the teaching assistants for VP140 (Physics I) in Summer 2015 when he was a sophomore student. In Fall 2016, he worked as teaching assistant for VM382 (Mechanical Behavior of Materials). He always loves his job of being a TA as well as being a TA mentor. Xue holds two workshops in CLT-JI. In “Grading Issues on Engineering Courses Workshop”, he shares his experience in how to become a good grader in the field of quantitative grading. In “Practice Teaching Workshop”, he delivers the workshop in a highly interactive manner, which he believes would help those new TAs to learn better.
Teaching Assistant Mentor – YANG Bohuan

Mr. YANG Bohuan is a senior ECE student and one of key members in Center for Learning and Teaching of the Joint Institute. He has worked as TA for five different courses, including some ECE core courses. As a TA Mentor, he provides suggestions to improve students’ learning experience and TAs’ performance. He welcomes TAs to consult with him if they have problems regarding the development of recitation classes, professionalism and the balance between work and life. He earns high evaluations from faculty members and staffs for his diligence and strong sense of responsibility. Yang thinks that he benefits a lot from the job as TA Mentor. He is so delighted that he has helped many students and his teaching strategies have been improved a lot. He believes that being a TA Mentor is definitely one of the most valuable experiences during college life.

Teaching Assistant Mentor – YAO Kaiqi

Mr. YAO Kaiqi is one of TA Peer Mentors in Center for Learning and Teaching of the Joint Institute (CLT-JI). Yao is a rather experienced TA and he enjoys the job as well. He thinks that it is interesting, meaningful, but also challenging to work as TA. Yao finds it pleasant to lead students, guide them, teach them all he knows, and eventually help them make great progress. Yao hopes that every new TA can all take advantage of the workshops held by CLT-JI and learn to be qualified TA. He expects all TAs can enjoy the job and work well with the students and the instructors.
Teaching Assistant Mentor – ZHANG Zherui

Mr. ZHANG Zherui is currently a sophomore student majoring in Mechanical Engineering. He has worked as teaching assistant for VY100 and VY200 (Academic Writing I & Academic Writing II). Joining Center for Learning and Teaching of the Joint Institute (CLT-JI) in 2016, he has held “Grading Issues on Humanity Courses Workshop” to train TAs to be qualified graders for humanity courses and made improvements in TA program of JI. Zhang emphasizes much on professionalism and ethics, which, in his opinion, play crucial roles in the job as TA. He believes that professionalism and ethics shapes a responsible TA while devotion and enthusiasm makes a TA outstanding. Zhang recommends that new TAs turn to their instructors or TA Mentors for help when they have some special concerns regarding their jobs. Great as the responsibilities are, TAs will harvest a lot as well. Communication skills, for instance, will be exercised very often in different scenarios and teaching strategies will be improved gradually. The most importantly, many students will benefit from TA’s efforts, which Zhang regards as the biggest reward of the job.

Teaching Assistant Mentor – ZHENG Huan

Ms. ZHENG Huan is currently working as Teaching Assistant Mentor in Center for Learning and Teaching of the Joint Institute (CLT-JI). Besides being TA Mentor, she is also an experienced TA. She has served great variety of courses including humanity courses, specialized courses in her major, and Physics Lab. She has received high appraisal from every instructor she has worked with. However, she would like to go beyond fulfilling TA jobs, so she dedicates in training new TAs and advancing the current TA training system. She is employed as TA Peer Mentor in Spring 2015 and is now holding two workshops in CLT. She shares tips and trick on holding recitation classes in “Practice Teaching Workshop”. Another workshop is called “Grading Issues on Engineering Courses”. She employs her rich experience in grading both humanity and engineering courses to tell the difference between these two kinds of courses and to show a way to grade fairly and consistently.
Information

This handbook is written and modified by CLT-JI Coordinator Ms. ZHAO Wenfang (Chief Editor, Chapter 1 & 6, Appendix A), CLT-JI Chief TA Mentor Mr. SHEN Li (Chapter 2, 4 & 5, Appendix B), CLT-JI TA Mentors Ms. Li Yingyu (Proofreading), Mr. LIN Yukai (Formatting) and Mr. ZHANG Zherui (Chapter 3, Appendix C) according to Teaching Assistant Policy of UM-SJTU Joint Institute. Special thanks to Associate Dean Prof. ZHENG Gang, Director of CLT-JI Prof. Thomas Hamade, Director of JI Academic Offices Mr. YANG Yanchun for their leadership and guidance; all the UEO academic coordinators for their suggestions and supports; and all the other TA Mentors for providing training workshop materials. TAs are welcomed to contact us at ji-clt@sjtu.edu.cn for further explanation, and at ji-tasc@sjtu.edu.cn for suggestions.
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