
Teaching at SUTD: Engaging the Learners



Dear graduate students,

Welcome to SUTD!

Learning Sciences Lab (LSL) from Office of Education would like to welcome you to the Graduate Course on "**Teaching at SUTD: Engaging the learners.**"

SUTD believes that Teaching Assistantship is essential for a holistic post-graduate education. In addition, Singapore's Ministry of Education requires that all Ph. D. scholars serve 1- 2 terms of teaching in their respective universities. As such, newly enrolled Ph. D students like you will be a Graduate Teaching Assistant at some point at SUTD.

It is recommended that all Ph.D. students (enrolled from September 2016) complete this pedagogy course before their GTA teaching if possible. It should also be noted that this course is compulsory for graduation.

Teaching in higher education, and especially at SUTD, is likely to be new experience to you. Teaching may also seem to be an onerous and challenging task while balancing research and other commitments. You may have several burning questions about being a GTA – such as "What is the teaching culture at SUTD?", "What is expected of a GTA?" and "How to be an effective GTA?"

To support you in your teaching assistantship, LSL has developed this Graduate Course on "**Teaching at SUTD: Engaging the Learners.**" This course is meant to be more than a training course that focuses on skills. We hope that the course helps you to gain a deeper understanding of the SUTD pedagogy, and thereby allows you to adapt to suit your contextual needs.

LSL has worked very closely with various stakeholders from SUTD such as the EPD Pedagogy Committee, EPD Graduate Committee, and senior Graduate Teaching Assistants to put together the course materials. We hope that the course helps in your teaching assistantship in SUTD and prepares you for a future career.

If you have any queries on teaching as a GTA, in particular on pedagogical matters, feel free to contact Learning Sciences Lab at nachamma@sutd.edu.sg for a consultation. Happy Teaching!

Thank you

Dr. Nachamma Sockalingam

Learning Sciences Lab

Tips and Strategies for Graduate Teaching Assistants at SUTD: A Guide

Role of a Graduate Teaching Assistant in SUTD

At SUTD, Graduate Teaching Assistants (GTAs) are engaged to support faculty instructors in the delivery of teaching/teaching-related activities in undergraduate courses to help students learn. In a nutshell, GTAs serve as the connectors between faculty instructor/s and students, supporting teachers in teaching and students in learning.

Compared with other higher education institutions in Singapore, SUTD's pedagogy is unique. It involves team teaching, in cohort classrooms, incorporating active and collaborative learning. Hence, student to faculty ratio is smaller compared to traditional universities. That means that the role of teacher, be it as a faculty instructor or GTA becomes more significant in SUTD than in traditional teaching. Successful teaching and learning at SUTD depends on the integrated tripartite relationship between the faculty instructor/s, GTAs and students



Often, the teaching requirements of courses vary across pillars, and disciplines. Hence, it is difficult to list out a definitive set of GTA duties and responsibilities that applies to all. Instead, we attempt to provide to general guiding principles, outlining the expectations of a GTA at SUTD.

Typically, GTAs are involved in activities such as

- (1) preparing homework assignments
- (2) assist in setting up classroom/lab/activities/simulations
- (3) demonstrating experiments/simulations/activities
- (4) teaching a small section of the lesson (when the instructor is present)
- (5) marking homework assignments
- (6) providing feedback on assignments
- (7) guiding students in their class/project/lab work
- (8) facilitating discussions online/face-to-face
- (9) assisting faculty instructor/s in taking attendance, managing classroom
- (10) proofreading slides/ instructional materials and uploading to eDimension for faculty instructor/s

This list is not exhaustive and it is best to work closely with the assigned faculty instructor/s to understand the objectives and outcomes of the course, and support them as needed.

GTAs are encouraged to seek feedback on their teaching from their faculty instructors and students and aim to continually improve their GTA teaching.

Assignment of GTA role

Typically, GTAs are assigned to large undergraduate classes at SUTD (of 40 students). Given that there are a number of modules at SUTD, GTAs may not always get to teach the subject they are researching on. While the Graduate Programmes Office takes all effort to match GTAs with the subject that they may be able to contribute best to, this may not match GTA's personal preferences at times.

If GTAs happen to be assigned to a slightly unfamiliar subject, then they are encouraged to evaluate the knowledge gap, discuss with their assigned faculty instructor/s on handling the subject matter, and determine how to contribute meaningfully to the course. Even though the topic/tools/resources may not be completely familiar to GTAs at all times, it is expected that GTAs invest time and effort in preparing to teach. As graduate students, it is expected GTAs will be flexible in learning new and related topics/subjects.

Experienced GTAs from SUTD recommend that it would be useful for PhD students to identify a couple of courses that they could possibly teach and then approach the faculty instructors and the Graduate Programmes Office to express their interest. Please note that this will be subject to availability and approval.

Expectations of a GTA

The chance to be a GTA at SUTD is an opportunity and honor. While one may view the role of GTA to be of obligatory service, it should be remembered that this also benefits the GTAs. GTA teaching hones disciplinary knowledge and skills. It also helps the GTAs to pick up additional skills such as leadership and facilitation skills.

The experience of being a GTA in an innovative institution such as SUTD will also add value to the curriculum vitae, and help GTAs in their future career. Moreover, all of this training comes at no cost to GTAs.

As such, GTAs are encouraged to utilize this opportunity well and give their best. The expectations of GTAs at SUTD are that they

1. Embrace SUTD values

- Leadership
- Integrity
- Passion
- Collaboration
- Creativity

2. Have a positive work attitude

As mentioned before, being given the responsibility of a GTA is a form of recognition and opportunity. As a scholar, researcher, and a teacher, it is expected that GTAs have the right and positive attitude toward GTA teaching (and research).

3. Prepare well and be proactive

“Fail to prepare and prepare to fail”. Preparing well would give you more confidence in the subject as a GTA. You will be able to anticipate your students’ knowledge gaps and help them better. You will also be able to teach the subject or contribute better.

4. Be punctual

Being early for lessons will give you more time to prepare and set up the classroom/learning space, and settle in. It would also give you time to interact with students as they stroll in. Getting to know your students and interacting with them will help you to foster a stronger working relationship with them. Also, your students would look up to as a role model. It will set a nice tempo and rhythm to your class as you will be more calm and collected.

5. Be present and engaged

As a GTA, you will be working in a team – that is, with faculty instructor/s and other GTAs. There may also be different activities during the class. Your involvement during the class may vary. At times you may be teaching or facilitating or observing. It is essential that you understand your involvement and synchronize with the team and remain engaged throughout the lesson to support the faculty instructor/s and students.

6. Maintain professionalism

Maintaining a neutral and professional work relationship with your students is a must - whether they are strangers or close friends to you. The role of GTA gives you a level of authority. It is essential that you use this authority with responsibility. Dressing appropriately, and knowing the boundaries of socializing are some good practices.

7. Communicate effectively

Working with diverse students from different nationalities, with different disciplinary background may not be easy. You may need to invest time and effort in understanding how to communicate effectively with your students and adapt to their learning styles.

Tips and Strategies for being an effective GTA at SUTD

Chickering and Gamson (1987) provided seven guiding principles for effective teaching in undergraduate courses. Here is an adaptation of the seven principles to GTA teaching at SUTD.

1. Set clear and challenging expectations

It is important that you set the ground rules about the lesson and activities with your students at the start of teaching engagement and communicate with your students on these. Goals and objectives should be clear and specific, and communicated with students. It is also important that you work with assigned faculty instructor/s to set appropriately challenging learning activities to engage your students. Setting too easy or difficult assignments may not interest students. Assignment requirements should also be communicated with students clearly.

2. Connect with your students

Reach out to your students and build a working relationship with them. Get to know your students by name and make a note to communicate with all your students. Encourage shy students to speak up and manage domineering and outspoken students. If needed, extend support to students who may need additional attention.

3. Encourage student-student interaction

Knowing your students personally, and their interest will help you in working with them and bringing them together in teams to work effectively. Encourage peer teaching and learning, and participation in class during group work.

4. Respects diverse talents and ways of learning

Get to know your students, and be flexible in your teaching to suit their needs. It will be useful to know your teaching style as well as your student's learning styles and adapt accordingly.

5. Encourage active learning in class

Take initiative to discuss with the teaching team on the teaching and learning activities and offer constructive suggestions to engage the students through active and collaborative learning. Perhaps you could design teaching activities such as demonstration or engaging question and answer session. Think of ways to make the learning meaningful and interesting.

6. Give prompt feedback

Students may be reserved at times to approach faculty instructor/s and may instead approach you (as their GTA). Be welcoming and supportive. Address queries and instead of completing work for students, facilitate student learning through Socratic questioning. Give timely and constructive feedback on the learning outcomes as well as processes so that students could learn deep.

7. Learn and Develop

Teaching, as any other profession, is a craft. You will need to invest time and effort in honing relevant teaching skills. Find opportunities to learn from your faculty instructors on how to teach effectively. Talk to other GTAs and establish a GTA community so that you can support each other. Identify and seek help from resource centre such as the Learning Sciences Lab.

Resources

[SUTD Learning Sciences Lab](#)

[Seven Principles for Good Practice in Undergraduate Education](#)

Acknowledgements

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Approaches to Teaching Inventory: SUTD version

This inventory is designed to explore a dimension of instructor's way of teaching¹

Even though you may not have started teaching at SUTD yet, please attempt the questionnaire based on what you think you would do as a teacher at SUTD.

Assume an ideal teaching situation (for you) and indicate what you are likely to do. For each item, please circle one of the numbers (1-5).

Answer all items.

Once you have completed, transfer your rating for each question to the scoring table on the last page and compute your total score.

¹ Inventory is adapted from Approaches to Teaching Inventory (by Michael Prosser and Keith Trigwell, 2004] by Nachamma Sockalingam, 2017 for SUTD.

Do not spend a long time on each: your first reaction is probably the best one. The numbers refer to

- 1 - rarely or almost never
- 2 - to some extent
- 3 - fifty-fifty
- 4 - to a large extent
- 5 - Almost always

1.	When I teach, students should focus on what I provide them.	1	2	3	4	5
2.	In my interactions with students, I would try to develop a conversation with them about the topics we are studying.	1	2	3	4	5
3.	It is important to present a lot of facts to students so that they know what they have to learn for this subject.	1	2	3	4	5
4.	In my teaching, I would set aside time so that the students can discuss, among themselves, key concepts and ideas in this subject.	1	2	3	4	5
5.	I would concentrate on covering the information that might be available from key texts and readings.	1	2	3	4	5
6.	In teaching sessions, I would deliberately provoke debate and discussion.	1	2	3	4	5
7.	I would structure my teaching to help students to pass the formal assessment items such as quiz/mid-term tests	1	2	3	4	5
8.	I think an important aspect of teaching would be to give students a good set of notes.	1	2	3	4	5
9.	I would provide the students with the information they will need to pass the formal assessments such as quiz/mid-term tests.	1	2	3	4	5
10.	I should know the answers to any questions that students may put to me.	1	2	3	4	5
11.	I would encourage my students to generate their own notes rather than providing them.	1	2	3	4	5
12.	I would question students' ideas instead of telling them my explanations/answers.	1	2	3	4	5
13.	My teaching would focus on the good presentation of information to students.	1	2	3	4	5
14.	I see teaching as helping students develop new ways of thinking in this subject.	1	2	3	4	5
15.	In teaching, it is important for me to monitor students' changed understanding of the subject matter.	1	2	3	4	5
16.	My teaching would focus on delivering what I know to the students.	1	2	3	4	5
17.	Teaching should help students question their own understanding of the subject matter.	1	2	3	4	5
18.	Teaching should include helping students find their own learning resources.	1	2	3	4	5

What is your score?

Question No	Score	Question No	Score
1		2	
3		4	
5		6	
7		11	
8		12	
9		14	
10		15	
13		17	
16		18	
Total		Total	

Teaching Principles Activity

Tips/Strategies	Seven Principles
	1. Set clear and challenging expectations
	2. Connect with your students
	3. Encourage student-student interaction
	4. Respects diverse talents and ways of learning
	5. Encourage active learning in class
	6. Give prompt feedback
	7. Learn and Develop