LSM4299 APPLIED PROJECT IN LIFE SCIENCES (16 MCs; Graded)

LSM4299 Coordinators
A/P Cynthia He, Department of Biological Sciences
dbshyc@nus.edu.sg
Ms. Charlene Ng, Specialist Associate, Department of Biological Sciences
dbsnsmcm@nus.edu.sg

1. Module Description
For students pursuing Bachelor of Science (Honours) degree with primary major in Life Sciences, to participate full-time in a six-month-long project in an applied context that culminates in a project presentation and report.

2. Rationale
The module LSM4299 Applied Project in Life Sciences is an option offered to Life Sciences Majors to be considered for the completion of the Level 4000 Honours year major requirements. Differing from and as an alternative to LSM4199 Honours Project in Life Sciences which generally involves a topic of basic or preclinical research, LSM4299 serves as a platform to accommodate internship and professional placements in applied and industrial contexts, as well as projects that are of non-basic/preclinical science research nature. Relevant projects of non-academic research nature may be in the areas of, but not limited to, administration and management, outreach and public awareness, marketing and business strategy, etc.

Please note that unlike LSM4199, this module LSM4299 does not contribute to the fulfillment of a specialisation in Life Sciences Major. Students embarking on LSM4299 and still wish to achieve a specialisation for the Life Sciences Major should make plans to complete six taught modules of LSM42xx all listed in the same specialisation. Also note that unlike UPIP, LSM4299 projects need to be broadly related to Life Sciences.

3. Criteria
These are the criteria to be met to be recognised as an opportunity for LSM4299:
- An internship encompassing a project with defined aims/objectives and deliverables;
- An applied context relating in any way and extent to Life Sciences;
- A length of full-time commitment of 20-24 weeks;
- Preferably (but not necessarily) to be based out of the University, including overseas. (If the internship is within the six Life Sciences teaching departments, it should clearly be of non-academic research nature. For example: An internship project on teaching and pedagogical research with an educator track faculty member within the 6 Life Sciences departments in NUS)

4. Pre-requisites
a. Fulfillment of the major requirements of Life Sciences at BSc standard (i.e. Levels 1000, 2000 and 3000 Major Requirements); and
b. Obtained a minimum overall CAP of 3.20 (for Matriculation Cohorts AY2012/2013 onwards) on completion of 100MCs (Modular Credits) or more.
5. Aims and Learning Outcomes

An Honours level project in an applied context immerses and prepares Life Sciences Major students with practical experience that differs from the nature of basic and preclinical science research. This is an equivalent to the default Honours year research project for students whose interests and directions lie beyond research in an academic environment.

This module acts as a platform for interested students to:

a) Initiate and engage full-time in a credit-earning project which deviates from the default basic and preclinical science research;

b) Self-source for and participate in a credit-earning project that serves as partial fulfilment to the Honours year requirements for Life Sciences Major;

c) Provide opportunities for students to translate knowledge learnt in the class to perform technical assignments in an actual working society;

d) Pick up the desired work attitudes and professionalism through learning and interactions with supervisors, co-workers, clients and other people related to the organisations/companies where the project is conducted;

e) Appreciate and internalise intangible attributes such as working independently as well as in a team, safety consciousness, and info-communication technology proficiencies;

f) Have a head-start in career search before graduation.

This module will also allow participating organisations/companies to be aware of NUS Life Sciences Major students and graduates, as well as to participate fully as our partners in cooperative education.

6. Workload, Duration and Timeline

Students embarking on an LSM4299 Applied Project will commit 20-24 weeks (i.e. 5-6 months) of full-time work. In academic record this is regarded as a module that is one regular semester in duration. Participating students are not expected to read other modules in NUS during the working hours within this period of commitment. Students may take LSM4299 in either Semester 1 (starting in June/July) or Semester 2 (starting in November/December), and complete modules for graduation requirements in the other regular semester.

<table>
<thead>
<tr>
<th>For LSM4299 to be completed in:</th>
<th>Semester 2 AY2017/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official semester window</td>
<td>15&lt;sup&gt;th&lt;/sup&gt; January to 12&lt;sup&gt;th&lt;/sup&gt; May 2018</td>
</tr>
<tr>
<td>Minimum duration</td>
<td>20 weeks</td>
</tr>
<tr>
<td>Application deadline</td>
<td>5&lt;sup&gt;th&lt;/sup&gt; December 2017</td>
</tr>
<tr>
<td>Latest start date</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; December 2017</td>
</tr>
<tr>
<td>Latest end date</td>
<td>27&lt;sup&gt;th&lt;/sup&gt; April 2018</td>
</tr>
<tr>
<td>Report to be submitted by</td>
<td>18&lt;sup&gt;th&lt;/sup&gt; April 2018 (Week 13)</td>
</tr>
<tr>
<td>Presentation would be scheduled</td>
<td>23&lt;sup&gt;rd&lt;/sup&gt; April to 11&lt;sup&gt;th&lt;/sup&gt; May 2018</td>
</tr>
<tr>
<td>Module registration / Grade issue in</td>
<td>AY2017/2018 Semester 2</td>
</tr>
</tbody>
</table>
For LSM4299 to be completed in: | Semester 1 AY2018/2019
---|---
Official semester window | 6th August to 8th December 2018
Minimum duration | 20 weeks
Application deadline | 2nd July 2018
Latest start date | 9th July 2018
Latest end date | 23rd November 2018
Report to be submitted by | Week 13 (Date TBC)
Presentation would be scheduled | 19th November to 7th December 2018
Module registration / Grade issue in | AY2018/2019 Semester 1

7. Procedures

a) Project/Internship Search and Application
The project search at default adopts the self-sourcing method. Student seeking an Applied Project would experience the equivalence of a job search process. To apply, please complete the LSM4299 Application Form and Work Plan [here](#). A formal offer letter (or equivalent) from the hosting entity for the project/internship position also has to be uploaded through the link. Only completed forms with offer letter uploaded will be considered.

b) Project/Internship Work Plan – *By Student in Consultation with Workplace Supervisor*
Every project/internship crafted for LSM4299 has to be reviewed and approved by the LSM4299 Coordinating Committee. A Work Plan is required as part of the application. It should include:
- Name of Organisation / Company / Institution / Unit
- Workplace Supervisor
- Project Title
- Project Aims/Objectives
- Project Description
- Relevance of Project with regards to Life Sciences
- Specific timeline/deadlines for assessments (see below Section 8. Assessments)

7. LSM4299 Staff Assessor
Every student taking LSM4299 would be tagged to a staff member whom will assess him/her. Students need not search for a staff assessor for LSM4299; this will be assigned by the LSM4299 Coordinating Committee for every approved project/internship. Nonetheless should there be a preferred staff member that a student wishes to engage as LSM4299 staff assessor and an agreement is obtained, this can be made known to the LSM4299 Coordinating Committee.

8. Assessment
General Assessment Structure:
A. Monthly log submissions (10%)
B. Performance assessment at workplace (40%)
C. Individual Presentation (20%)
D. Report (30%)
A. Monthly log submissions (10%) – Assessed by Staff Assessor; submitted by Student every month.
A total of five work progress logs have to be submitted. Each log is submitted monthly in IVLE and each successfully received log will be awarded up to 2% to the final score.

B. Performance assessment at workplace (40%) – Assessed by Workplace Supervisor; submitted by Workplace Supervisor at the end of the project. This would be coordinated by the LSM4299 committee.
An assessment on the work performance of the student would be carried out by the workplace supervisor at the end of the project.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) General Work Attitude (i.e. attendance, promptness in meeting timelines, professional conduct and outlook)</td>
<td></td>
</tr>
<tr>
<td>(b) Initiative and Relevant Skills/Competencies (i.e. pro-activeness; logical and systematic problem-solving capacity; ability and proficiency in performing the assigned work/tasks)</td>
<td></td>
</tr>
<tr>
<td>(c) Teamwork (i.e. ability and willingness to work co-operatively with others as a group/team to achieve common objectives)</td>
<td></td>
</tr>
<tr>
<td>(d) Flexibility (i.e. ability to adapt and work effectively in different situations and contexts; capacity to deal with changes)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
</tr>
</tbody>
</table>

C. Individual Presentation (20%) – Assessed by Staff Assessor; presented by Student at the end of the project.
An individual presentation would be delivered by the student at the end of the project, to give an overview of the job and project experience in about 10 minutes, and should cover:

- Job responsibilities and profile of the company/organization;
- Description, progress and deliverables of project;
- Skills learnt and their impacts on individual career development, as well as the connections between the project completed and the knowledge received from the undergraduate Science and Life Sciences education.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Presentation Organisation (i.e. logical flow of contents; neat and clear slides)</td>
<td></td>
</tr>
<tr>
<td>(b) Presentation Skills (i.e. ability to express clearly, coherently and confidently, and to address questions from examiner)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
</tbody>
</table>
D. Report (30%) – Assessed by Staff Assessor; submitted by Student at the end of the project.

A self-evaluation report would be submitted by the student at the end of the project, covering contents including:

- Description and profile of the company/organization/section/department;
- Job responsibilities and project undertaken;
- Progress of project and how the deliverables may translate to business strategy/solution;
- Reflections on skills picked up and how these would impact individual career development, as well as the connections between the project completed and the knowledge received from the undergraduate Science and Life Sciences education.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Coverage (i.e. sufficient contents to address the required pointers appropriately, reflecting commitments during the term of project)</td>
<td></td>
</tr>
<tr>
<td>(b) Communication (i.e. ability to express clearly and coherently in reporting the self-evaluation)</td>
<td></td>
</tr>
<tr>
<td>(c) Critical Thinking (i.e. ability to identify and address issues/problems in logical and systematic manner)</td>
<td></td>
</tr>
<tr>
<td>(d) Connections (i.e. ability to apply knowledge and skills received during the undergraduate training at the workplace, and awareness about oneself in terms of career readiness and preparation)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

The direct total score of the four assessment components would be the final score to the module.

----- End -----