JOINT DEGREE PROGRAMME (JDP)
NUS BACHELOR OF SCIENCE (HONOURS) IN LIFE SCIENCES WITH UNIVERSITY OF DUNDEE

1. Overview of Programme
This Joint Degree Programme (JDP) National University of Singapore (NUS) Bachelor of Science (Honours) in Life Sciences [BSc (Hons)] with University of Dundee (UoD) is designed to be completed in four years, and to be taught in NUS and UoD. The Programme combines the strengths of both universities’ undergraduate curricula, integrates overseas experience into the undergraduate studies, and awards a jointly validated BSc (Hons) degree qualification.

NUS students in this JDP will complete the degree requirements as per that of NUS BSc (Hons) degree in Life Sciences. Participants will spend the first two-and-a-half years in NUS before moving to and staying at UoD for three regular semesters (i.e. the 6th to 8th semesters inclusive of their course of undergraduate study). This study abroad segment thus includes the Honours year.

2. A Programme in Drug Discovery and Design for the Biopharmaceutical Industry
Singapore has ventured into the biopharmaceutical manufacturing for over a decade, and in recent years substantially moving into the field of drug discovery. To enhance the biopharmaceutical manufacturing and to complement the development of clinical trial, trained professionals with the repertoire of relevant skill sets are crucial. This JDP enables NUS students to experience and be trained in research projects of industry standard and scale in drug optimization and design.

Life Sciences at the UoD is the highest-rated for Biological Sciences in the UK. The Drug Discovery Unit (DDU) of the UoD School of Life Sciences is actively developing drugs for the treatment of neglected tropical diseases including malaria, leishmaniasis, Chaga’s disease, African sleeping sickness and tuberculosis and translating innovative drug targets in oncology, eczema, type-2 diabetes, anti-bacterials and anti-virals.

University of Dundee | School of Life Sciences | Drug Discovery Unit

Participants in this JDP are set to conduct their Honours year research project in UoD focusing on drug discovery and development, jointly supervised and assessed by the faculty members of both universities.

3. JDP Requirements
NUS participants in this JDP would complete in NUS – 52MC (Modular Credits) of Major requirements, 8MC of Faculty requirements, 20MC of General Education, and 20MC of Unrestricted Elective Modules. In UoD, NUS students would read 35MC towards the Major requirements and 25MC towards the Unrestricted Elective Modules.

Please refer to the following summary of programme requirements and the recommended study plan for this JDP in Annex A (at the end of this document).
4. Admissions
Open to Year 1 Life Sciences Major in NUS Faculty of Science.

*Eligible undergraduate candidates will need to gain entry to NUS Faculty of Science first, and declare to read Life Sciences Major as the primary discipline.*

Application window is at the end of the first semester in the first year of the candidature. Life Sciences Majors in the senior years may apply but the study plan may deviate as scheduled. All applicants will undergo a selection process and shortlisted applicants will be required to attend an interview to assess their academic competencies, aptitude and suitability for the programme, as well as other relevant criteria.

5. Continuation and Exiting the Programme
NUS students in this JDP must maintain a CAP of 4.00 or above (out of 5.00) for the BSc (Hons) degree. A student whose CAP falls below 4.00 for any semester will be reviewed for continuation with the programme. The student may exit the JDP and complete the default BSc/BSc (Hons) degree in NUS, the latter if the student meets the Honours requirements and wishes to pursue the Honours class. NUS students in this programme can choose to withdraw and continue with the default BSc/BSc (Hons) degree.

6. Application for AY19/20 Intake
Application is open now for the freshman of Cohort AY2019/20. Applicants should expect a CAP of at least 4.0 at the end of first semester, and shortlisted candidates will be required to attend an interview.

To apply, please download and fill in the application form.

Kindly submit the completed form, together with the statement of interest, to the Department of Biological Sciences Administration Office Block S3 Level 5 (Attn: Mr Lim Miah Kyan). Please make the submission by Thursday 24 October 2019.

7. Enquiry
Please contact Life Sciences Enquiry.
Tel: 6516 2698
Email: dbsbox2@nus.edu.sg
### Annex A

**Schedule for Completion of Joint Degree Programme**  
*NUS BSc (Hons) in Life Sciences with University of Dundee*  
*Cohorts AY2017/18 onwards*

**JDP Study Plan for BSc (Hons) in Life Sciences with the University of Dundee.**

Numbers in [ ] indicates Modular Credits (MC).

<table>
<thead>
<tr>
<th>Semester</th>
<th>At NUS</th>
<th>At UoD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YEAR 1</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1st Semester (Sem 1) & 2nd Semester (Sem 2) | LSM1102 Molecular Genetics [4]  
LSM1105 Evolutionary Biology [4]  
LSM1106 Molecular Cell Biology [4]  
ST1232 Statistics for Life Sciences [4]  
Faculty Requirements:  
Either CST1010 (or variant) OR COS2000 for Computational Thinking [4]  
SP1541 Exploring Science Communication through Popular Science [4]  
General Education Modules [5X4=20] | |
| **YEAR 2** | | |
| 3rd Semester (Sem 1) & 4th Semester (Sem 2) | LSM2191 Laboratory Techniques in Life Sciences [4]  
LSM2234 Physical Concepts in Biology [4]  
LSM2241 Introductory Bioinformatics [4]  
Either LSM2232 Genes, Genomes and Biomedical Implications OR LSM2233 Cell Biology [4]  
Unrestricted Elective Modules [20]  
- Including CM2121 Organic Chemistry 2 | |
| **YEAR 3** | | |
| 5th Semester (Sem 1) | LSM3211 Fundamental Pharmacology [4]  
LSM3225 Molecular Microbiology in Human Diseases [4]  
LSM3231 Protein Structures and Functions [4]  
(Grade-and-Credit-Transfer; equivalent to 20MC)  
BS32007 Organic Synthesis (15 credits)  
BS32003 Drug Discovery and Development (15 credits)  
BS32012 Project B/Lab Mini-project (15 credits)  
BS32010 Applied Bioinformatics (15 credits) |
| 6th Semester (Sem 2) | | **UoD Modules (in UoD credits)**  
(Grade-and-Credit-Transfer; equivalent to 40MC)  
BS41004 Research Project: Biological Sciences (40 credits)  
BS41005 Research Skills in Biological Sciences (20 credits)  
BS31004 Biochemistry and Cell Biology (15 credits)  
BS42004 Advanced Modern Drug Discovery (15 credits)  
BS42011 Advanced Organic Chemistry (15 credits)  
One BS4xxxx course (15 credits) |
| **YEAR 4** | | |
| 7th Semester (Sem 1) & 8th Semester (Sem 2) | | |

**Note:**
To complete in NUS – 52MC of Major requirements, 8MC of Faculty requirements, 20MC of General Education, and 20MC of Unrestricted Elective Modules. In UoD, NUS students would read 35MC towards the Major requirements and 25MC towards the Unrestricted Elective Modules.