

Capstone Learning

- Requires students to integrate knowledge and skills to accomplish some nontrivial tasks in their areas of disciplinary study
- Focuses on integration and application
- 6 or 12 credits
- After completion of at least 24 credits of advanced level (level 3 or above) courses in that major

Capstone courses

- **BIOL3993 Directed Studies in Molecular Biology & Biotechnology**
- **BIOL4993 Molecular Biology & Biotechnology Project**
- **BIOL4963 Molecular Biology & Biotechnology Internship**

Directed Studies

Intensive write-up of a topic based on current knowledge with or without laboratory research

Need a supervisor and required to consult him/her throughout the time

Come up with conclusions based on literature research

Assessments:

1. Written report
2. Oral presentation

Research project

(GPA 3.0 or above)

Intensive write-up of a topic based on laboratory research

Need a supervisor and required to work in his/her lab

Come up with conclusions based on lab work and other published results

Assessments:

1. Written report
2. Oral presentation
3. Attending 2 public seminars at SBS

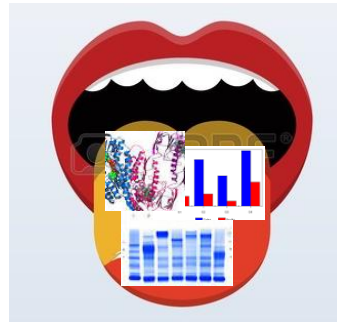
Assessments

Directed Studies:

1. Written report 6000-8000 words (by early April)
2. Oral presentation 10-15 min (in May)



2.



Project:

1. Written report 9000-12000 words (by early April)
2. Oral presentation 20-25 min (in May)
3. Attending 2 postgrad or guest seminars at SBS (during the semesters)

3.



News about SBS seminars:
SBS web → News & Events

Directed Studies or Project

Procedures to enroll:

- **Enroll in online system**
- **Consult individual teacher for title and agreement as supervisor (see next page)**
- **Submit registration form to SBS General Office**

**School of Biological Sciences
BIOL3993 Directed Studies in Molecular Biology &
Biotechnology
REGISTRATION FORM**

This form should be completed by ALL students intending to undertake an undergraduate dissertation (BIOL3993) in The School of Biological Sciences. This form needs to be signed by the prospective supervisor and course coordinator. When completed it should be handed in to the School Office, Room 6N-01, Kadoorie Biological Sciences Building prior to Course Selection.

Name / University No.:

Year:

Major in:

HKU Email Address:

Contact Number:

Provisional Directed Studies Title:

Confirmed by prospective Supervisor:

Name:

Signed: _____ Date: _____

Please pass this form to Ms. Eva Tam in Rm 6N-01, KBSB prior the course selection.

Endorsed by Course Coordinator:

Dr W.K. Yip

Signed: _____ Date: _____

**School of Biological Sciences
BIOL4993 Molecular Biology and Biotechnology Project
REGISTRATION FORM**

This form should be completed by ALL students intending to undertake an undergraduate project (BIOL4993) in The School of Biological Sciences. This form **needs to be signed by the prospective supervisor**. When completed it should be handed in to the School Office, Room 6N-01, Kadoorie Biological Sciences Building prior to Course Selection.

Name:

University No:

Major in: _____ Cumulative GPA: _____

HKU Email address:

Contact Number: _____

Provisional Project Title:

Confirmed by prospective Supervisor:

Name:

Signed: _____ Date: _____

Please pass this form to Ms. Eva Tam in Rm 6N-01, KBSB prior the course selection.

Endorsed by Course Coordinator:

Dr W.K. Yip

Signed: _____ Date: _____

Teachers who will serve as your supervisor:

4th floor KBSB

Professor Chow Billy K.C. (molecular biology, gene expression, bioactive peptide action and function)
Dr. Lui W.Y. (cell and molecular biology, gene expression, immunological detection of proteins)
Professor Wong Alice S.T. (cell and molecular biology, cancer development)
Professor Wong Anderson O.L. (hormonal regulations in fish and human, gene expression in fish models)
Dr. Yan Aixin (microbial physiology, antibiotic and multidrug resistance)

5th floor KBSB

Professor Leung Frederick C.C. (systems biology, pathogenesis and molecular epidemiology of viral diseases, viral genome analysis)
Dr. Lim Wallace B.L. (molecular biology, functional plant proteins)

6th floor KBSB

Dr. Gu Ji-Dong (Environmental microbiology and toxicology, bacterial metabolic pathways)
Dr. Panagiotou Gianni (computational biology, metabolic engineering, metagenomics, industrial biotechnology).
Dr. Yuen Karen W.Y. (molecular and cell biology, cell cycle analysis)
Dr. Zhang Jiangwen (gene regulation network, signaling pathway in stem cells, tumorigenesis and systems biology)

7th floor KBSB

Professor Chye M.L. (molecular biology, agricultural biotechnology, protein characterization)
Dr. Lo Clive S.C. (natural plant products, biochemistry and molecular biology).
Dr. Tsang Jimmy S.H. (genetic and protein analysis in microbes, bacterial expression systems)
Dr. Yip W.K. (plant biochemistry and plant hormones)

Information on capstone courses

SBS web → Teaching/UG Resources →
capstone courses → MBB or BS

Summary

1. What is directed studies or project? The former leads to the production of a review journal article, the latter leads to a research journal paper.
2. The assessment = a written report + oral presentation (+ seminar attendance for project course)
3. Should have passed 24 credits of advanced courses in the major (and with GPA 3 or above for project).
4. Students after enrolled in directed studies or project should approach a teacher to serve as the supervisor.
5. Fill in the registration form and return to SBS Office by September 11.

Internship

	Summer term	1 st semester	2 nd semester
Submit application form/ CV/job description and consideration of suitability	April/May	August	Nov/Dec
Deadline for submission of application	Early July	Early November	Early April
Submission of report/ employer assessment and oral presentation	September	Late November	Late April to May

Internship employer assessment form



**THE UNIVERSITY OF HONG KONG
(SCHOOL OF BIOLOGICAL SCIENCES)**

Evaluation on Intern Students

Dear Employer/Supervisor,

Please complete an assessment for each of the internship student and return it by mail to School of Biological Sciences, The University of Hong Kong, Hong Kong or by fax at 28583477. Thank you.

_____ (School of Biological Sciences)

Name of Company/Organization: _____

Name of Student: _____

Internship Period: _____ (Total no. of working hours: _____)

Employer's/Supervisor's Assessment

1. Please describe briefly the nature of the work undertaken by the student during the internship:

2. Please assess the performance of the intern student by checking the most appropriate box for each item listed.

- | | | | | |
|-------------------------|------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Knowledge of discipline | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Work effectiveness | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Attitude | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Communication skills | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Reliability | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Motivation | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Team worker | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |
| Willingness to learn | <input type="checkbox"/> Very good | <input type="checkbox"/> Good | <input type="checkbox"/> Fair | <input type="checkbox"/> Poor |

3. Please circle the grade you would give the student for his/her overall performance during the internship.

A+ A A- B+ B B- C+ C C- F

4. Suggestions for the student:

Name of Assessor: _____ Signature: _____

Position in Company/Organization: _____

Contact Number: _____ Email: _____

Date: _____