**TQF 3 Course Specifications**

**Section 1 General Information**

1. Course code and course title

 Thai

 English Internship in Biological Science

2. Number of credits 4 (0-12-0) (Lecture/Lab/Self-study)

3. Program and type of subject

 3.1 Program Undergraduate Degree (International Program)

 3.2 Type of Subject Elective course

4. Course Coordinator and Course Lecturer

 4.1 Course Coordinator TBA

 4.2 Course Lecturer TBA

5. Trimester/ Year of Study

 5.1 Trimester

 5.2 Course Capacity Approximately…25 .students

6. Pre-requisite

7. Co-requisites

8. Venue of Study Mahidol University International College

9. Date of Latest Revision 05 April 2018

**Section 2 Goals and Objectives**

1. Course Goals

This course offers students an opportunity to interact with professionals in the workplace to gain knowledge and skills specific to their chosen field of study and interest. The course aims to build on students’ self-management and problem solving skills and provides documented contextual proof of their skills and competencies. The course also provides students with a deeper understanding of an industry or sector allowing them to make better informed decisions about their future career pathways.

2. Objectives of Course Development/Revision

 2.1 Course Objectives

2.1.1

2.1.6 Exercise intellectual curiosity, critical thinking and independent learning

 2.2 Course-level Learning Outcomes: CLOs

 By the end of the course, students will be able to (CLOs)

1. CLO 1 Apply knowledge in Biological Sciences
2. CLO 2 Apply technical skills in Biological Sciences
3. CLO 3 Integrate discipline-specific knowledge and technical skills across different disciplines
4. CLO 4 Demonstrate proficiency in written communication of Biological Sciences
5. CLO 5 Maintain data integrity
6. CLO 6 Demonstrate accountability and responsibility
7. CLO 7 Independently complete in-class assignment
8. CLO 8 Apply concept of laboratory safety and field study safety.
9. CLO 9 Able to set, plan and accomplish assigned project in a timely manner

**Section 3 Course Management**

1. Course Description

(Thai)

(English) xxxx

2. Credit hours per trimester

|  |  |  |
| --- | --- | --- |
| Lecture(Hour(s)) | Laboratory/field trip/internship(Hour(s)) | Self-study(Hour(s)) |
| - | - | - |

3. Number of hours that the lecturer provides individual counseling and guidance.

4 hours per week

**Section 4 Development of Students’ Learning Outcome**

1. Short summary on the knowledge or skills that the course intends to develop in students (CLOs)

 By the end of the course, students will be able to

CLO 1 Apply knowledge in Biological Sciences

CLO 2 Apply technical skills in Biological Sciences

CLO 3 Integrate discipline-specific knowledge and technical skills across different disciplines

CLO 4 Demonstrate proficiency in written communication of Biological Sciences

CLO 5 Maintain data integrity

CLO 6 Demonstrate accountability and responsibility

CLO 7 Independently complete in-class assignment

CLO 8 Apply concept of laboratory safety and field study safety.

CLO 9 Able to set, plan and accomplish assigned project in a timely manner

2. Teaching methods for developing the knowledge or skills specified in item 1 and evaluation methods of the course learning outcomes

|  |  |  |
| --- | --- | --- |
| CLO | Teaching methods | Evaluation Methods |
| CLO 1 | Team-based learning; Project-based learning; on-the-job training | Supervisor evaluation; Daily learning journal |
| CLO 2 | Team-based learning; Project-based learning; on-the-job training | Supervisor evaluation; Daily learning journal |
| CLO 3 | Team-based learning; Project-based learning; on-the-job training | Supervisor evaluation; Daily learning journal |
| CLO 4 | Team-based learning; Project-based learning; on-the-job training | Daily learning journal; Internship Experience Report |
| CLO 5 | Team-based learning; Project-based learning; on-the-job training | Supervisor evaluation; Daily learning journal |
| CLO 6  | Team-based learning; Project-based learning; on-the-job training; discussion | Supervisor evaluation |
| CLO 7 | Assignment | Supervisor evaluation; Internship experience report |
| CLO 8 | Team-based learning; Project-based learning; on-the-job training | Supervisor evaluation; Daily learning journal |
| CLO 9 | Team-based learning; Project-based learning; on-the-job training | Internship Agreement; Supervisor evaluation; Daily learning journal; Internship experience report |

**Section 5 Teaching and Evaluation Plans**

1. Teaching plan

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week | Topic | Number of Hours | Teaching Activities/ Media | Lecturer |
|  | Lecture Hours | Lab/Field Trip/InternshipHours |  |
|  | Internship |  |  | Team-based learning; Project-based learning; on-the-job training | Internship provider |
|  | Submission of Daily learning journal; Report |

2. Plan for Assessing Course Learning Outcomes

 2.1 Assessing and Evaluating Learning Achievement

 a. Formative Assessment

 Supervisor reports

 b. Summative Assessment

(1) Tools and Percentage Weight in Assessment and Evaluation

Internship Experience Report; updated Resume Supervisor evaluation; Daily learning journal

|  |  |  |
| --- | --- | --- |
|  Learning Outcomes | Assessment Methods | Assessment Ratio (Percentage) |
| CLO 1 | Supervisor evaluation | 3 | 5 |
| Daily learning journal | 2 |
| CLO 2 | Supervisor evaluation | 5 | 8 |
| Daily learning journal | 3 |
| CLO 3 | Supervisor evaluation | 8 | 10 |
| Daily learning journal | 2 |
| CLO 4 | Daily learning journal | 2 | 5 |
| Internship experience report | 3 |
| CLO 5 | Supervisor evaluation | 6 | 10 |
| Daily learning journal | 4 |
| CLO 6 | Supervisor evaluation | 10 | 10 |
| CLO 7 | Supervisor evaluation | 10 | 15 |
| Internship experience report | 5 |
| CLO 8 | Supervisor evaluation | 8 | 10 |
| Daily learning journal | 2 |
| CLO 9 | Internship agreement | 5 | 27 |
| Supervisor evaluation | 10 |
| Daily learning journal | 5 |
| Internship experience report | 7 |

 (2) Grading System

 100%-90% A

 89%-85% B+

 84%-80% B

 79%-75% C+

 74%-70% C

 69%-65% D+

 64%-60% D

 < 60% F

(3) Re-examination (If course lecturer allows to have re-examination)

 N/A - (Not applicable with MUIC)

3. Student Appeals

Students are able to submit appeals either in person or via email to course coordinator within 7 days of receiving the final grade.

**Section 6 Teaching Materials and Resources**

1. Textbooks and/or other documents/materials

Haag E. Internship guide: work placements step by step. Eleven International Publishing, 2012

2. Recommended textbooks and/or other documents/materials

1. Scientific articles chosen from relevant databases

3. Other Resources (If any)

 Lecture handouts

**Section 7 Evaluation and Improvement of Course Management**

1. Strategies for evaluating course effectiveness by students

1.1 Student feedback of instructors, teaching methods and materials, and course content through MUIC student evaluation forms

1.2 Written feedback submitted via Program Director

2. Strategies for evaluating teaching methods

2.1 Evaluation of effectiveness based on student evaluation scores and comments

2.2 Evaluation through peer observations by co-instructor or other Division faculty

3. Improvement of teaching methods

3.1 Adjustments based on student feedback, personal observations, comments from peer observations and discussions with supervisor and/or other Division faculty in one-on-one and/or group meetings as specified by MUIC guidelines.

3.2 Adjustments based on recommendations from peer-observation, co-instructor or other faculty members

4. Verification process for evaluating students’ standard achievement outcomes in the course

4.1 Verification through student performance on assessments based on MUIC/Division standards

5. Review and plan for improving the effectiveness of the course

5.1 Course instructors (and coordinator/supervisor) will meet to discuss results of student evaluations and student performance based on learning outcomes in order to identify points for improvement

5.2 Program instructors meet to discuss curriculum evaluation and improvement in the monthly Program meetings chaired by the Program Director

**Appendix**

 **Alignment between Courses and Program**

Table 1 The relationship between course and Program Learning Outcomes (PLOs)

|  |  |
| --- | --- |
|  Course NameInternship in Biological Science | Program Learning Outcomes (PLOs) |
| PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 |
| ICBI 465 | R | - | R | M | - | - |

**Note:** Indicate the level of CLOs by letter I, R, P or M. Using the information as shown in the Curriculum Mapping of TQF2

Table 2 The relationship between CLOs and PLOs

|  |  |
| --- | --- |
| (Course code)ICBI 383 | Program Learning Outcomes (PLOs) |
| PLO 1 | PLO 2 | PLO 3 | PLO 4 | PLO 5 | PLO 6 |
| CLO 1  | 1.2 |  |  |  |  |  |
| CLO 2 | 1.4 |  |  |  |  |  |
| CLO 3  | 1.5 |  |  |  |  |  |
| CLO 4 |  |  | 3.2 |  |  |  |
| CLO 5 |  |  |  | 4.1 |  |  |
| CLO 6 |  |  |  | 4.2 |  |  |
| CLO 7 |  |  |  | 4.3 |  |  |
| CLO 8 |  |  |  | 4.4 |  |  |
| CLO 9 |  |  |  | 4.5 |  |  |

Table 3 The description of PLOs and Sub Los of the course

|  |  |
| --- | --- |
| PLOs | SubPLOs |
| PLO 1 Apply discipline-specific knowledge and technical skills in biological sciences | 1.2 Apply knowledge in Biological Sciences |
| 1.4 Apply technical skills in Biological Sciences |
| 1.5 Integrate discipline-specific knowledge and technical skills across different discipline |
| PLO 3 Demonstrate proficiency in oral and written communication of scientific concepts | 3.2 Demonstrate proficiency in written communication of Biological Sciences |
| PLO 4 Apply scientific integrity and professionalism | 4.1 Maintain data integrity |
| 4.2 Demonstrate accountability and responsibility |
| 4.3 Independently complete in-class assignment |
| 4.4 Apply concept of laboratory safety and field study safety |
| 4.5 Able to set, plan and accomplish assigned project in a timely manner |