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Institute of Tropical Biology and Conservation

GRAPHIC DESIGNS
Syarikat Percetakan Suria

The publisher wishes to acknowledge the invaluable assistance of all individuals and organisations in the production of this publication.

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Printed in Malaysia by Syarikat Percetakan Suria.

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UNIVERSITI MALAYSIA SABAH
MOBILITY PROGRAMMES

This book is a joint effort from all faculties
and institutes in compiling a series of mobility
programmes into one book. This book
shows how we appreciate the Regional,
Experience and Development gained from
the contributors of each faculty, centre and
institute. Therefore we want to share with
our participants throughout these mobility
programmes.

WHAT DO WE WANT TO
ACHIEVE?

Acting as the “bridge” for the university,
Universiti Malaysia Sabah Mobility
Programmes aims to provide a platform
indicating various exciting mobility
programmes for local and international
participants thus engaging towards a better
relationship between Universiti Malaysia
Sabah and other institutions.
FOREWORD BY THE VICE CHANCELLOR OF UNIVERSITI MALAYSIA SABAH
“Selamat datang” (Welcome) to Universiti Malaysia Sabah (UMS), where we welcome diversity and emerge as one, under the skies of the Land Below the Wind. In UMS, we have the culture of sharing goodness, thus we would like to give this opportunity of sharing our knowledge and experience with you.

Through the Universiti Malaysia Sabah Mobility Programmes I would like to present to you our various, well-constructed mobility programmes, organised into one book by our own team of academics and experienced expertise. In this book, we have 10 faculties, 2 centres and 3 institutes of excellence who have contributed towards the making of these mobility programmes. Our university has designed these various mobility programmes to suit the minds and souls of those who seek for knowledge and adventure.

From this book, we would be able to share with you the knowledge and experience that you would enjoy, thus you can share with your own country. I strongly encourage you to take up this exciting opportunity and all that it has to offer. I hope you enjoy yourself here, where diversity can be shared and act as one. Once again, “selamat datang” to UMS.

PROF. DATUK DR MOHD HARUN ABDULLAH
VICE CHANCELLOR
UNIVERSITI MALAYSIA SABAH
Institution and Community Interaction

Why is this interesting to me?
The “Why is this interesting to me?” exposes participants in skills of institutional and communal interaction with specific community or social group, while experiencing immediate social situation especially among peripheral community. Participants will also be guided to ways of interaction with rural community, the elderly, school students and others in Malaysia. This course will also incorporate soft-skills enhancement in which participants must actively demonstrate in related social and community activities and programmes.

Learning Objectives
At the end of the programmes participants shall be able to acquire / generate / demonstrate:
- knowledge and skills in institutional and communal interaction
- interactive communication, social interaction, leadership and teamwork skills in community projects
- professional values, attitudes and ethics

How long do I experience learning?
Eighteen (18) days*

*Note: Reduced to 16 days for Malaysian participants and those with Bahasa Melayu knowledge

Language Proficiency
The course will be conducted in English language. However where necessary, participants will also learn basic conversational Malay language for interaction with the local community.

What should I expect to learn?
Participants will learn about Malaysia’s socio-economic and cultural background.

CENTRE FOR CO-CURRICULUM AND STUDENT DEVELOPMENT

Course Activities
During the period of this programme, participants will participate in:
- 1½ - 2 weeks of lecture sessions (including sessions in the Outdoor Development Centre for team building and other skills).
- 1 week of preparation and implementation of community project (including presentation and closing ceremony).

The lecture sessions will be conducted by the Centre for Co-Curriculum and Student Development (PKPP), Universiti Malaysia Sabah.

Participants will participate in field trips to carry out activities with the local communities in locations to be identified around the state of Sabah, Malaysia.

Cost of the Programme
USD1,640* (inclusive of accommodations, food, course materials, field trips, community projects and transportation services)

* Note: Cost per person is an estimate based on a group of 20 participants. Estimate may change based on the number of participants and location of the community project.

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
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Colours of Malaysia: Experiencing Multiculturalism in Malaysian Borneo

Why is this interesting to me?
The short-term, “tailor-made” programme introduces participants to multiculturalism in Malaysia, with a specific focus on the country’s rich ethno-cultural and linguistic diversity. It comprises a compendium of elective “mix-and-match” courses, which are specifically designed to expose participants to a variety of ethnic languages as well as cultural norms, values and practices, which define the essence of Malaysia’s multicultural identity.

The elective courses are generally conducted in both interactive classroom and outdoor settings, where participants will be given both theoretical and practical exposure to the ethnic languages and cultures of their selection. Soft-skills training is incorporated in all courses offered under the programme, where participants are expected to actively demonstrate in course-related interactive classroom and outdoor activities.

This programme will be offered by the Centre for the Promotion of Knowledge and Language (PPiB), Universiti Malaysia Sabah.

Learning Objectives
At the end of the programme, participants shall be able to acquire/generate/demonstrate:
- general/specific knowledge of Malaysian languages, cultural heritage and traditions
- understanding and appreciation of Malaysian languages, cultural heritage and traditions
- interactive communication and social interaction, as well as other related soft-skills

Language Proficiency
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic and command of the English language to optimise the learning outcomes of the programme.

CENTRE FOR THE PROMOTION OF KNOWLEDGE AND LANGUAGE LEARNING

How long do I experience learning?
Two (2) Weeks, comprising one (1) week of interactive classroom activities as stipulated above, and one (1) week of preparation and implementation of study trips and outdoor activities.

What should I expect to learn?
Participants will be occasionally accompanied by local students from UMS throughout the duration of the programme, to provide opportunity for further interactions to enhance their learning process.

Cost of Programme
USD1,730 per person/pax (for a minimum of ten (10) pax) inclusive of transportation (programme specific), course materials, field trips and community-engagement activities in Sabah and Sarawak.

Course Activities

<table>
<thead>
<tr>
<th>ACTIVITIES</th>
<th>PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language, Culture and Heritage of Malaysia (Core)</td>
<td>One week (10 hours)</td>
</tr>
<tr>
<td>Cultures and Heritage of Sabah (Supplementary)</td>
<td>One week (10 hours)</td>
</tr>
<tr>
<td>Kadazandusun–Murut Folklores and Oral Traditions (Supplementary)</td>
<td>One week (10 hours)</td>
</tr>
<tr>
<td>Traditional Music and Songs of Malaysia (Supplementary)</td>
<td>One week (10 hours)</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON

DR JEANNET STEPHEN
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E-mail : jeannets@ums.edu.my
Core Objectives
At the end of the programme, participants shall be able:
- To understand better the natural heritage concept and observe the integrated conservation efforts for sustainability and eco-tourism.
- To enhance participants understanding of the ecotourism potential and its impacts to environment, economy and local community.
- To experience first hand and document visually various ecotourism features at selected destination in Sabah (Kinabalu Park, Lower Kinabatangan Wildlife Sanctuary, Sepilok Orang Utan Rehabilitation Centre and Tunku Abdul Rahman Park).
- To analyse the effectiveness of the various ecotourism initiatives in Sabah.
- To create awareness of the importance of preserving ecotourism resources through voluntary activity.

How long do I experience learning?
Two (2) weeks.

Language Proficiency
The programme will be conducted in English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,200 (inclusive of accommodations, food, course materials, field trips, community projects and transportation)

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTANCY

Course Activities
During the period of this programme, participants will participate in:
- 1 week of an intensive lecture session.
- 1 week of field trips + on-site lectures + voluntary activity (conservation and community development), presentation and closing ceremony.

The lecture session will be conducted by Facuty of Business, Economics and Accountancy, UMS. Participants will participate in field trips to Kinabalu Park, Kinabatangan Wildlife Sanctuary, Sepilok Orang Utan Rehabilitation Centre and Tunku Abdul Rahman Park. The participants also have the opportunity to interact with local community by participating in homestay programme.

*Subject to change
*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
KAMARUL MIZAL BIN MARZUKI
HEAD OF UNIT
BIMP – EAGA UNIT FOR TOURISM DEVELOPMENT
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Green Practices in Resort Operations

Why is this interesting to me?
The course on Green Practices in Resort Operations is coordinated by BIMP-EAGA Unit for Tourism Development and Faculty of Business, Economics and Accountancy, UMS. The course introduces and provides participants with knowledge of green practices in resort operations focusing on sustainability aspects.

Within this programme, participants will learn about the environmental operating practices of resort operation and experience the different settings of the resorts in Sabah (island resort, nature resorts and homestay). Participants will experience their stay in the resort accredited by Green Globe. Participants will also be introduced to the warm and hospitable Nature Resort City of Kota Kinabalu.

What should I expect to learn?
Participants will learn about Sabah/Borneo’s socio-economic environment, political and cultural background.

Learning Objectives
At the end of the programme, participants shall be able:
- To understand the concept of green/sustainable resort.
- To expose to the different settings of the resorts in Sabah.
- To experience the stay in the resort accredited by Green Globe.
- To familiarise with the services offered by the known Green Resort.
- To identify the resort operation strategies for achieving greater environmental sensitivity and sustainability.
- To understand and examine the environmental operating practices of resort operation.

How long do I experience learning?
Two (2) weeks.

Language Proficiency
The programme will be conducted in English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,200 (Inclusive of accommodations, food, course materials, field and transportation)

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTANCY

Course Activities
During the period of this programme, participants will participate in:
- 1 week of lecture + practical session
- 1 week of field trips

The lecture session will be conducted by Faculty of Business, Economics and Accountancy, UMS. Participants will participate in field trips to Nature Resort and Island Resort. The participants also have the opportunity to interact with local community by participating in homestay programme.

*Subject to change
*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
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Learning Objectives
At the end of programme, participants shall be able:
• To understand the nature of entrepreneurship and its characteristics.
• To enhance participants’ understanding of the entrepreneurial opportunities, potential and its impacts to environment, economy and local community.
• To experience at first hand the entrepreneurial process (e.g.: fieldwork and trips to local enterprises).
• To analyse the effectiveness of entrepreneurship development initiatives in Sabah.
• To create awareness, improving the entrepreneurial mind-set and creating climate where people are inspired to become entrepreneurs.

How long do I experience learning?
Three (3) days.

Language Proficiency
The programme will be conducted in English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD450 (inclusive of accommodations, food, course materials, field trips, community projects and transportation)

Why is this interesting to me?
The course on Entrepreneurship Education is coordinated by Faculty of Business, Economics and Accountancy, UMS. The course introduces and provides participants to understand the opportunities of our entrepreneurial economy by infusing entrepreneurship-related activities.

The participants will learn about the concept of entrepreneur on its nature and characteristics.

Participants will also study the physical landscape, local people and Sabah’s entrepreneurial opportunities.

What should I expect to learn?
Participants will learn about Sabah/Borneo’s socio-economic, political and cultural background.

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTANCY

Course Activities
During the period of this programme, participants will participate in:
• 1 day lecture session
• 1 day field trips to small enterprises in Sabah
• Mini Convention “Let’s Get Started”

The lecture session will be conducted by Faculty of Business, Economics and Accountancy, UMS. Participants will participate in field trips to various small enterprises in Sabah producing local products such as handicrafts, “amplang” and chocolate.

The participants also have the opportunity to interact with local community, sharing ideas and networking.

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*Subject to change
*A certificate of participation will be awarded at the end of the course.
Borneo Culture and Heritage Package

Why is this interesting to me?
This course introduces the history, culture and heritage of Sabah. It is a comprehensive package consisting of lectures on campus, field trips and short homestays.

It is designed to provide an interactive experience for undergraduate students from overseas universities and their accompanying academic staff with UMS students and indigenous peoples of Sabah.

What should I expect to learn?
A programme to introduce participants to cultural aspects of the Borneo communities.

Learning Objectives
At the end of the programme, participants shall be able:
• To appreciate the peoples and cultures of Sabah.
• To know about the archaeology of Sabah.
• To understand traditional worldviews and religions of Sabah.
• To know the history of North Borneo and the role of Sabah in the formation of Malaysia.
• To appreciate the music.
• To understand the ethnic relations in Sabah.

How long do I experience learning?
One (1) week

Language Proficiency
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have a basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodation, food, course materials, field trips, community projects and transportation)

Course Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>See the making of and learn to play Kadazan</td>
<td>Kampung Tikolod, Tambunan</td>
</tr>
<tr>
<td>Dusun traditional musical instruments, and</td>
<td></td>
</tr>
<tr>
<td>learn to make handicrafts</td>
<td></td>
</tr>
<tr>
<td>Homestay in the remote and pristine</td>
<td>Kampung Buan, Penampang</td>
</tr>
<tr>
<td>environment of the Crocker Range</td>
<td></td>
</tr>
<tr>
<td>Visit to the Iranun women weavers’ village</td>
<td>Kampung Rampayan Laut, Kota Belud</td>
</tr>
<tr>
<td>See a modern village gong making industry</td>
<td>Kampung Sumangkap, Matunggong</td>
</tr>
</tbody>
</table>

FACULTY OF HUMANITIES, ARTS AND HERITAGE

<table>
<thead>
<tr>
<th>Activities</th>
<th>Venue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homestay in a traditional Rungus longhouse</td>
<td>Kampung Bavanggazo, Matunggong</td>
</tr>
<tr>
<td>Overnight stay in the traditional houses</td>
<td>Sabah Museum’s Heritage Village, Kota Kinabalu</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
PROF. DR. JACQUELINE PUGH-KITINGAN
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Educational Experience in Rural Sabah, Malaysia Borneo

Why is this interesting to me?
The course provides participants with the opportunity to experience rural education within the socio-cultural context of Sabah. The participants will have the opportunity to communicate with and learn how the indigenous participants in rural schools live their lives and cope with the demand of modern education.

What should I expect to learn?
Participants will be partnered with local students from UMS and local families during their stay to give them the opportunity to learn more about Sabah and its people.

Learning Objectives
At the end of the programme, participants shall be able to acquire/demonstrate:
- knowledge in Sabah’s rural education and community
- communication skills
- leadership and teamwork skills through community projects
- professional values, attitudes and ethics

How long do I experience learning?
One (1) week

Language Proficiency
The programme will be conducted in the English language. However, participants will also learn basic conversational Malay languages to enable them communicate with members of local communities.

Participants are required to have basic and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodations, food, course materials, field trips, community projects and transportation.)

FACULTY OF PSYCHOLOGY AND EDUCATION

Course Activities
During the period of this programme, participants will participate in:
- A week planned activities (including 2 days of lecture sessions and a 5-day field trip to specially selected rural villages (homestay activities).
- Lecture sessions conducted by guests and Universiti Malaysia Sabah’s lecturers.
- The promotion of lifelong learning among rural community in Sabah.

* A certificate of participation will be awarded at the end of the course.

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Learning Objectives
At the end of the programme, participants shall be able:
• To introduce various statistical tests and interpretation of results analysis using SPSS and SEM.
• To enhance knowledge of practical data analysis.
• To develop statistical skills and understanding on statistical and questionnaire development.

How long do I experience learning?
Ten (10) days

Language Proficiency
The course will be conducted in the English language. However, participants will also learn basic conversational Malay language for interaction with the local community.

Cost of Programme
USD1,200 (inclusive of accommodations, food, course materials, field trips, community projects and transportation)

FACULTY OF INTERNATIONAL FINANCE LABUAN

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrival</td>
</tr>
<tr>
<td>2</td>
<td>Questionnaire development</td>
</tr>
<tr>
<td>3</td>
<td>Questionnaire development</td>
</tr>
<tr>
<td>4</td>
<td>SPSS levels 1 and 2</td>
</tr>
<tr>
<td>5</td>
<td>SPSS levels 1 and 2</td>
</tr>
<tr>
<td>6</td>
<td>SEM levels 1 and 2</td>
</tr>
<tr>
<td>7</td>
<td>SEM levels 1 and 2</td>
</tr>
<tr>
<td>8</td>
<td>Labuan historical experience</td>
</tr>
<tr>
<td>9</td>
<td>Labuan historical experience</td>
</tr>
<tr>
<td>10</td>
<td>Departure</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
ASSOC. PROF. DR SYED NASIRIN BIN SYED ZAINOL ABIDIN DEAN
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What should I expect to learn?
Basic biology knowledge is necessary for this course. Outdoor field experiences e.g. camping are essential for this course.

Learning Objectives
At the end of the programme, participants shall be able:
- To increase participant’s awareness on biological diversity.
- To create an understanding in conservation and the complexities in the communication of biological diversity topics in environmental education.
- To provide first-hand experience on various environmental observation and education techniques.

How long do I experience learning?
One (1) week

Language Proficiency
The medium of communication and instruction for this course is English. In order to apply for this course, a participant is expected to have the ability to adequately converse in English.

Cost of Programme
USD1,500 (inclusive of course materials, field trips, accommodation, sustenance and transportation)

Borneo Diversity Conservation
and Awareness Exposure

Why is this interesting to me?
Youths shall one day inherit the Earth’s and shall have the responsibility of managing its biological diversity. To appreciate this inheritance, they will need knowledge about the Earth’s biological diversity. The Sabah Biological Diversity Education and Conservation is a course designed to introduce the subject of biological diversity to participants and it involves hands-on experience in biodiversity conservation. This course provides first-hand experience without forgoing the comfort, security and safety; it is based on a nature-based tourism activity.

The one-week course consists of mainly field trips to various conservation areas that represent in situ and ex situ biological diversity initiatives in Sabah. On-route to several ecological rich ecosystems over a period of almost one week, this course allows participants to explore the environment first-hand under the guidance of educators and hospitality personal. The course also provides the opportunity for participants to experience local communities that are directly and indirectly dependent on biodiversity resources. At the end of this course, participants are expected to demonstrate heightened awareness level about the Earth’s biological diversity in a series of presentations.

INSTITUTE FOR TROPICAL BIOLOGY AND CONSERVATION

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Registration and briefings</td>
</tr>
<tr>
<td></td>
<td>Talks on Biological Diversity at ITBC UMS</td>
</tr>
<tr>
<td>2</td>
<td>Site visit and field survey at Kota Kinabalu Wetlands Sanctuary</td>
</tr>
<tr>
<td></td>
<td>Talks on social needs and development</td>
</tr>
<tr>
<td>3</td>
<td>Site visit and survey at Poring Hot Springs, Ranau</td>
</tr>
<tr>
<td></td>
<td>Site visit at Kg. Luanji, Ranau</td>
</tr>
<tr>
<td>4</td>
<td>Cultural activities led by Mahaua local community</td>
</tr>
<tr>
<td>5</td>
<td>Site visit and field survey at Gunung Alab Sub-station</td>
</tr>
<tr>
<td></td>
<td>Talks on the concept of conservation</td>
</tr>
</tbody>
</table>

6 * Course assessment and presentation
7  * Report submission and closing ceremony

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
PROF. DR. CHARLES SANTHANARAJU A/L VARIAPPAN
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A Beginner’s Guide to Forensic DNA

Learning Objectives
At the end of the programme, participants shall be able:
1. To understand the unique features of the human DNA and its role as a barcode fingerprint.
2. To demonstrate competency in processing biological samples such as blood, urine, tissue for DNA isolation.
3. To perform DNA profiling using state-of-the-art DNA sequences.
4. To appreciate the complexity of Ethical, Legal and Social Implications (ELSI) in forensics investigations.

How long do I experience learning?
One (1) week (available twice a year during March-April and August-September). A minimum of five participants is needed to run this course. Application should be submitted before each 15th February or 15th July.

Language Proficiency
The programme will be conducted in the English language. Participants are required to have a basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodations, food, course materials, field trips and transportation if required).

Why is this interesting to me?
Imagine being a member of the CSI team! DNA fingerprinting is now used routinely to solve crimes. In recent years, news stories have reported how miniscule amounts of DNA have been used to identify individuals involved in incidents even many years in the past, as well as exonerate innocent people from incrimination. This short-term course offers layman a glimpse of how investigators use DNA to solve crimes.

What should I expect to learn?
Learn how to perform DNA isolation from blood stains or body fluids. Learn how each individual person has a unique DNA profile (except for identical twins!) and how these profiles are used as evidence to prosecute perpetrators in criminal investigations.

Learning Objectives
At the end of the programme, participants shall be able:
1. To understand the unique features of the human DNA and its role as a barcode fingerprint.
2. To demonstrate competency in processing biological samples such as blood, urine, tissue for DNA isolation.
3. To perform DNA profiling using state-of-the-art DNA sequences.
4. To appreciate the complexity of Ethical, Legal and Social Implications (ELSI) in forensics investigations.

How long do I experience learning?
One (1) week (available twice a year during March-April and August-September). A minimum of five participants is needed to run this course. Application should be submitted before each 15th February or 15th July.

Language Proficiency
The programme will be conducted in the English language. Participants are required to have a basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodations, food, course materials, field trips and transportation if required).

BIOTECHNOLOGY RESEARCH INSTITUTE

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Forensics DNA</td>
</tr>
<tr>
<td>2</td>
<td>Visit to DNA laboratory</td>
</tr>
<tr>
<td>3</td>
<td>Lab activity – Preparing biological samples</td>
</tr>
<tr>
<td>4</td>
<td>Hands-on Lab activity</td>
</tr>
<tr>
<td>5</td>
<td>Hands-on Lab activity – DNA Fingerprinting</td>
</tr>
<tr>
<td>6</td>
<td>Analysis of results and crime scene and cases</td>
</tr>
<tr>
<td>7</td>
<td>Discussion on ELSI and conclusion</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded by Universiti Malaysia Sabah upon completion of the course.

CONTACT PERSON
ASSOCIATE PROFESSOR DR. VIJAY KUMAR
Biotechnology Research Institute
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Fax : +6088-320993
E-mail : vijay@ums.edu.my
Exploring Medicinal Plants for Drug Discovery

Course Structure
In this short-term course, participants will be exposed to a real-world approach to science, by learning about the processes of how drugs are discovered. Activities involved include searching for local medicinal plants in local markets ‘tamu’, processing the plants (root, bark or leaves) to obtain its potential drug chemistry and performing a biological assay to investigate the antibacterial properties of samples.

What should I expect to learn?
Participants with good foundation in chemistry and biochemistry will be an added advantage.

Learning Objectives
At the end of the programme, participants shall be able:

- To extract chemical compounds from medicinal plant
- To perform various bioassays of plant extracts.
- To play the roles of chemists, biologists, and team members involved in the drug discovery pipeline.

How long do I experience learning?
One (1) week (available twice a year during March-April and August-September). A minimum of five participants is needed to run this course.

Language Proficiency
The programme will be conducted in the English language. Participants are required to have a basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodations, food, course materials, field trips and transportation if required).

BIOTECHNOLOGY RESEARCH INSTITUTE

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrival and check-in</td>
</tr>
<tr>
<td>2</td>
<td>Briefing and tour of the laboratories</td>
</tr>
<tr>
<td>3</td>
<td>Introduction of local medicinal plants and drug discovery</td>
</tr>
<tr>
<td>4</td>
<td>Searching herbal medicine in local ‘tamu’ markets</td>
</tr>
<tr>
<td>5</td>
<td>Isolation, purification, and characterization of potential drug compounds</td>
</tr>
<tr>
<td>6</td>
<td>Exploration of various bioassays</td>
</tr>
<tr>
<td>7</td>
<td>Data analysis and discussion</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded by Universiti Malaysia Sabah upon completion of the course.

CONTACT PERSONS
DR TEOH PEIK LIN
MS CHEONG BO ENG
Biotechnology Research Institute
Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia
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        bocheong@ums.edu.my
Discovering the Diversity of Borneo using DNA Barcodes

Course Structure
This is your opportunity to learn and to discover the amazing biological diversity associated with one of the world’s biodiversity hotspots using the most advanced molecular biology tools. This short-term course offers you the opportunity to explore the rainforests of Borneo, collect a specimen for laboratory analysis, extract DNA and sequence the DNA barcoding region. Come and experience the biodiversity of Borneo at the Biotechnology Research Institute.

What should I expect to learn?
An understanding of the process of DNA Barcoding and its application to molecular taxonomy.

Learning Objectives
At the end of the programme, participants shall be able:
1. To collect and catalogue samples from the wild.
2. To extract DNA from samples.
3. To amplify the DNA Barcoding region using the Polymerase Chain Reaction (PCR).
4. To sequence PCR amplicons.
5. To identify the species using bioinformatics tools for comparative analysis.

General Knowledge
No prior knowledge required. Basic laboratory skills will be an added advantage but the most important criterion is an inquisitive mind.

How long do I experience learning?
One (1) week (available twice a year during March-April and August-September). A minimum of five participants is needed to run this course.

Language Proficiency
The programme will be conducted in the English language. Participants are required to have a basic command of the English language to optimise the learning outcomes of the programme.

Cost of Programme.
USD1,500 (inclusive of accommodations, food, course materials, field trips and transportation if required).

BIOTECHNOLOGY RESEARCH INSTITUTE

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrival and check-in</td>
</tr>
<tr>
<td>2</td>
<td>Briefing and tour of the laboratories</td>
</tr>
<tr>
<td>3</td>
<td>Introduction of natural resource from Sabah &amp; biotechnology</td>
</tr>
<tr>
<td>4</td>
<td>Sample collection, overnight stay at sampling site</td>
</tr>
<tr>
<td>5</td>
<td>Isolation of genetic material from collected sample</td>
</tr>
<tr>
<td>6</td>
<td>Manipulation of genetic material in a test tube</td>
</tr>
<tr>
<td>7</td>
<td>Data analysis and interpretation</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded by Universiti Malaysia Sabah upon completion of the course.

CONTACT PERSON
DR KENNETH FRANCIS RODRIGUES
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**Learning Objectives**
At the end of the programme, participants shall be able to appreciate:
- The ecological, socio-economic and cultural significance of the coastal area to society
- The governance complexity of coastal resource-use conflicts
- The interdisciplinary requirements of adaptive management responses to achieve sustainable use
- The history and culture of Sabah’s coastal communities

**How long do I experience learning?**
Two (2) weeks (one week in-class lecture and one week field trip)

**Cost of Programme**
USD1,950 / participant or USD19,500 / group of 10 participants (inclusive of accommodations, food, course materials, field trips, community projects and transportation)

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**Tropical Marine Ecosystems Research Excursion**

**Why is this interesting to me?**
This Tropical Marine Ecosystems Research Excursion comprises of one week in-class phase and one week field trip. The in-class phase consists of lectures, assignments and interactive discussions, provides participants with the necessary background of the region’s coastal resource utilisation and management issues. The field trip will allow participants to appreciate the various marine ecosystems in Sabah.

**What should I expect to learn?**
It is an advantage to the participant if he or she has a valid diving licence. Minimum number of participants for the programme to be effectively conducted is 10.

**Language Proficiency**
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic "What should I expect to learn?" and command of the English language to optimise the learning outcomes of the programme.

---

**BORNEO MARINE RESEARCH INSTITUTE**

**CONTACT PERSON**
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## Tropical Marine Ecosystems Research Excursion

### Course Activities

#### WEEK 1
- Coastal habitats: Estuaries, lagoons, islands, mangrove swamps, seagrass meadows and coral reefs
- Ecosystem services: Fisheries, marine biodiversity, water quality, carbon sequestration, tourism and recreation
- Significance of coastal biodiversity
- The uniqueness of Sabah coastal biodiversity

### BORNEO MARINE RESEARCH INSTITUTE

### Course Activities

#### WEEK 1
- Coastal zone utilisation trends and status
- Trends in utilisation of coastal zone of Sabah
- Shoreward migration of people: Seafront developments for business and recreation in Sabah
- Coastal aquaculture (land-based farming systems, sea pen culture and cage culture)
- Overview of coastal utilization and marine environment trends in Southeast Asia
- Sustainability of the coastal zone
- Sustainable management of marine ecosystems

### Contextual Knowledge

#### WEEK 1
- Biophysical features of the coastal zone
- Different coastal types (sandy beaches, rocky shore and mud-banks)
- Rivers, river mouths and estuaries
- Lagoons and islands
- Intertidal habitat and its flora and fauna: unique features and adaptations of intertidal animals
- Marine parks

### Course Activities

#### WEEK 1
- Socio-cultural diversity of Sabah. Selected groups of communities (Dusun, Murut, Paitanic and Coastal Sama-Bajau) representing examples of interior agricultural, riverine and maritime populations engaged in a variety of traditional socio-economic activities, from sedentary populations and shifting cultivators to sea nomads
- How cultural traditions, roles and worldviews connect to coastal use and management and how cultural traditions can be integrated with current management practices

### Climate change adaptations

- Climate change vulnerability of coastal zone.
- Adaptation measures: Public awareness (tools, strategies and modules for sustainability studies), coastal infrastructure and development planning, wetland preservation and mitigation, ICZM plan, policies related to fisheries and aquaculture development
- Stabilisation of disturbed coastal marine ecosystems with control on land-based activities
- Seafood security in a changing climate
- How international organisations are contributing to local climate adaptation measures
Tropical Marine Ecosystems Research Excursion

Course Activities

WEEK 1

Anthropogenic Pressures to the Coastal Zone

Multiplicity of human uses of coastal zone
Impact of human activities on coastal ecosystem
Urbanisation and land uses in degradation of water and soil quality, pollution, contamination, eutrophication, overfishing, alienation of wetlands, habitat degradation and species extinction
Specific nature of anthropogenic pressures on habitats such as coral reefs, wetlands, seagrass beds, lagoons, mangroves, shorelines, estuaries, islands, continental shelf and semi-enclosed bays

Management challenges unique to the coastal zone

Integrated Coastal Management (ICM) and challenges
Ecosystem restoration
Process of adaptive management and incorporation of local/traditional knowledge

WEEK 2

Field work
Participants will appreciate the various marine ecosystems in Sabah which include wetland, coral reef, mangrove forest and estuary. While appreciating the beautiful marine ecosystems, participants will also have the opportunity to experience how coastal communities utilise and manage their surrounding ecosystems

Out in the field

BORNEO MARINE RESEARCH INSTITUTE

Course Activities

WEEK 1

Management modes of Integrated Coastal Management

Types of community-based management
Required frameworks
Fisheries stock enhancement for community welfare
Integrated multitrophic aquatic food production modules, community-based management of coastal and marine resources (fisheries and carbon sinks)
How participation and incorporation of local/traditional knowledge can enhance management

*A certificate of participation will be awarded at the end of the course.
**Green Gold: The Renewable and Sustainable Oil Palm**

**Why is this interesting to me?**
Palm oil is the leading vegetable oil in the world. Its applications are ranging from cooking oil, consumer products and now as major feedstock for biodiesel. Being the main competitor in the world market, palm oil has been surrounded by controversies such as unsustainable farming, destruction of peat land, deprivation of Orang Utan as a result of extensive plantation, unhealthy palm oil properties and so on. Being a learned person, the best response is to witness the actual situation. Therefore, the best place to see and get first-hand information about palm oil is Malaysia, in particular Sabah, since Malaysia is the largest palm oil producer in the world. Be it your mission to find the truth about the controversies or your mission to educate yourself about the vast advantages of palm oil such as its sustainable plantation, processing, product derivatives, wastewater treatment and value-addition of palm oil mill effluents for biogas production or both, hence this course is for you.

**What should I expect to learn?**
Knowledge in computer such as word processing, spreadsheet and presentation, as well as the internet is considered basics for this programme. Communication skills will be a great advantage because participants will be dealing with diverse people’s background.

**Learning Objectives**
At the end of the programme, participants shall be able:
- To learn and be exposed to the sustainable palm oil plantation, ecosystem around plantation and animal conservation practices.
- To learn about production process and the effluent treatment by visiting palm oil mill and palm oil refinery mill.
- To learn about biodiesel production process and processes of value-addition of palm oil-based products.

**How long do I experience learning?**
Two (2) weeks.

**Language Proficiency**
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic “What should I expect to learn?” and command of the English language to optimise the learning outcomes of the programme.

**Cost of Programme**
USD4,000 (Inclusive of accommodations, food, course materials, field trips, community projects and transportation)

**Course Activities**
- Field trips (this includes famous eco-tourism spots and palm oil related industries)
- Practical experience (Making biodiesel)
- Meeting with local communities and industries
- Lectures

*A certificate of participation will be awarded at the end of the course.*

**Faculty of Engineering**

**Contact Person**
**DR RAZAK MOHD. ALI LEE**
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Elective Health Services (Northern Borneo)

**Learning Objectives**

**Community and Rural Medicine Education Centre Posting**
At the end of this module, participants are expected to be able:

- To identify the significant socio-cultural and health issues of the rural communities visited.
- To demonstrate their communication and observation skills.
- To work in harmony with the allied-health professionals.
- To assist in effective delivery of primary health care in rural settings.
- To appreciate the importance of rural medicine and rural health care for overall development of rural communities.

**District Hospital Posting**
The participants should have the opportunity to experience:

- The essence of medical practice in a tropical rural setting of Borneo.

**Cost of Programme**

USD1,200 (inclusive of accommodations, food, course materials, field trips, community projects, and transportation)

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**FACULTY OF MEDICINE AND HEALTH SCIENCES**

**Course Activities**
Participants will be exposed to:

- Introductory briefings
- Small group discussions
- Seminars
- Presentations and case-based discussions
- Field visits to the adjacent rural communities
- Hospital visits to the District Hospitals serving the area
- Organised visits to areas of public health importance
- Meetings with the Primary Health Care providers
- Meetings with the personnel from health care organisations
- Cultural activities of the area
- Organised sight-seeing trips

*A certificate of participation will be awarded at the end of the course.*

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**Language Proficiency**
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic/"What should I expect to learn?" and command of the English language to optimise the learning outcomes of the programme.

**CONTACT PERSON**
MOHD. NIZAR HAMID
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Fax : +6088-320321 (Academic Unit)
E-mail : nizar@ums.edu.my
**Elective Posting (Clinical)**

**Why is this interesting to me?**
An elective module requiring participants to observe, experience and learn the significance of Sabah communities while working with the health care providers and health-related organisations of the area. Elective posting in different clinical subjects at Faculty of Medicine and Health, UMS is much sought after by medical students from various overseas countries. Being the only medical faculty in Sabah, we treat and attend to a large number of both inpatients and outpatients. We also have a wide range of subspecialties and support services. Our aim is to expose these participants to the wide spectrum of clinical education as experienced by our students from the local medical faculties. We will welcome applications. For those interested, there is an application form to be filled out. We will then consider the objectives of these participants, those who are going to benefit the most from the programme and the total number of applicants at any particular period before informing the candidate of an acceptance.

**How long do I experience learning?**
To be decided by the participants subject to approval by the respective Clinical Elective Posting Coordinator not less than one (1) week (preferably two weeks) for one subject in each department and NOT MORE than 3 departments per attachment.

**Language Proficiency**
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic/"What should I expect to learn?" and command of the English language to optimise the learning outcomes of the programme.

**FACULTY OF MEDICINE AND HEALTH SCIENCES**

**Course Activities**
1. Participants will be allowed to attend lectures, small group discussions, seminars, ward round teachings, bedside teachings, workshops and observe activities in the operation theatre.

2. Participants will have the opportunity to participate and observe the process of:
   i. Direct/indirect clinician-patient interaction experiences
   ii. Clinical decision-making skills
   iii. Clinical working environment and framework headed by Consultants under clinical departments
   iv. Local medical educational activities

*A certificate of participation will be awarded at the end of the course.*

**Cost of Programme**
USD1,200 (Inclusive of accommodations, food, course materials, field trips, community projects and transportation)

**CONTACT PERSON**

MOHD. NIZAR HAMID  
INFORMATION TECHNOLOGY OFFICER  
Faculty of Medicine and Health Science  
Universiti Malaysia Sabah, Jalan UMS, 88400 Kota Kinabalu, Sabah, Malaysia  
Tel. : +6088-320000  Ext.: 611017  
Fax : +6088-320321 (Academic Unit)  
E-mail : nizar@ums.edu.my
ICT for Developing Societies and Rural Area

Why is this interesting to me?
ICT has become a powerful tool for empowering societies everywhere. ICT for Development (ICT4D) has become an important branch of the field in promoting the contribution of ICT in providing sustainable solutions to developing societies. This practical course aims to provide hands-on experience on how ICT can make a difference in the lives of those in developing countries. Participants will be required to conduct an e-community programme that will utilise ICT in a community in Sabah/Labuan. This course will also offer participants an experience living in a rural area in Sabah.

What should I expect to learn?
Even though not compulsory, a good grasp of ICT knowledge will be very beneficial for participants.

Learning Objectives
At the end of the programme, participants shall be able:
• To learn how ICT can be a tool for empowering developing societies.
• To promote the concept of ICT for development among the next generation of ICT professionals.
• To expose participants to the digital divide faced by developing societies.

Course Activities

<table>
<thead>
<tr>
<th>WEEK (Planning)</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1: Registration</td>
<td></td>
</tr>
<tr>
<td>Day 2: Introduction on the course</td>
<td></td>
</tr>
<tr>
<td>Day 3: Project proposal development</td>
<td></td>
</tr>
<tr>
<td>Day 4: Project proposal development</td>
<td></td>
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<tr>
<td>Day 5: Project proposal defence</td>
<td></td>
</tr>
<tr>
<td>Day 6: Rest</td>
<td></td>
</tr>
<tr>
<td>Day 7: Rest</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEEK (Implementation)</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1: Visit to the project site</td>
<td></td>
</tr>
<tr>
<td>Day 2: Preparation for project implementation</td>
<td></td>
</tr>
<tr>
<td>Day 3: Preparation for project implementation</td>
<td></td>
</tr>
<tr>
<td>Day 4: Project implementation</td>
<td></td>
</tr>
<tr>
<td>Day 5: Project implementation</td>
<td></td>
</tr>
<tr>
<td>Day 6: Rest</td>
<td></td>
</tr>
<tr>
<td>Day 7: Rest</td>
<td></td>
</tr>
</tbody>
</table>

How long do I experience learning?
Three (3) weeks

Language Proficiency
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic/”What should I expect to learn?” and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD2,000 (inclusive of accommodations, food, course materials, insurance, permit fees, field trip and land transportation in Sabah)

FACULTY OF COMPUTING AND INFORMATICS

<table>
<thead>
<tr>
<th>WEEK (Reflection)</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1: Discussion with project respondents and supervisor</td>
<td></td>
</tr>
<tr>
<td>Day 2: Project Report writing up</td>
<td></td>
</tr>
<tr>
<td>Day 3: Project Report writing up</td>
<td></td>
</tr>
<tr>
<td>Day 4: Project Report writing up</td>
<td></td>
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<tr>
<td>Day 5: Project Report presentation</td>
<td></td>
</tr>
<tr>
<td>Day 6: Rest</td>
<td></td>
</tr>
<tr>
<td>Day 7: Rest</td>
<td></td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
DR ZAMHAR ISWANDONO BIN AWANG ISMAIL
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Basic Food Hygiene Course

Learning Objectives
At the end of the programme, participants shall be able:
- To have knowledge on basic food hygiene and food safety (hygienic foods, food poisoning, food handling etc.).
- To have knowledge on various aspects in food handling and processing such as Food Act, Food Law and Certifications (GMP, HACCP).

How long do I experience learning?
Seven (7) days

Language Proficiency
The programme will be conducted in English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic "What should I expect to learn?" and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,200 (inclusive of accommodations, food, course materials, insurance, permit fees, field trip and land transportation).

FACULTY OF FOOD SCIENCE AND NUTRITION

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to Food Hygiene and Food Poisoning</td>
</tr>
<tr>
<td>2</td>
<td>Food Act 1983 and Food Hygiene Regulations 2009</td>
</tr>
<tr>
<td>3</td>
<td>Food Hygiene Standards: Good Manufacturing Practice (GMP), Hazard Critical Control Point (HACCP), MeSTi and Food Safety Management System</td>
</tr>
<tr>
<td>4</td>
<td>Site visit: Food preparation premises or food manufacturing premise</td>
</tr>
<tr>
<td>5</td>
<td>Site visit: Food preparation premises or food manufacturing premise</td>
</tr>
<tr>
<td>6</td>
<td>Assignment preparation</td>
</tr>
<tr>
<td>7</td>
<td>Presentation</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
DR HASMADI BIN MAMAT
DEPUTY DEAN (ACADEMIC AND STUDENT AFFAIRS)
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Learning Objectives
At the end of the programme, participants shall be able:
• To have fundamental knowledge on chocolate making and bakery products.
• To have hands-on chocolate and bakery products making experience.
• To learn the nutritional values of chocolate and sugar confectionery and any issues related.

How long do I experience learning?
Seven (7) days

Language Proficiency
The programme will be conducted in English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic “What should I expect to learn?” and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,200 (Inclusive of accommodations, food, course materials, insurance, permit fees, field trip and land transportation)

FACULTY OF FOOD SCIENCE AND NUTRITION

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to processing and quality control of bakery and confectionery products</td>
</tr>
<tr>
<td>2</td>
<td>Visit to flour factory and Malaysian Cocoa Board</td>
</tr>
<tr>
<td>3</td>
<td>Practical: Bakery product</td>
</tr>
<tr>
<td>4</td>
<td>Practical: Chocolate product</td>
</tr>
<tr>
<td>5</td>
<td>Practical: Sugar confectionery</td>
</tr>
<tr>
<td>6</td>
<td>Visit: Bakery factory and Simply Chocolate</td>
</tr>
<tr>
<td>7</td>
<td>Baking and chocolate making competition</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSON
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Why is this interesting to me?
Discover a whole world of chocolate and bakery and the fun to do it! Chocolate and bakery products have become one of the most popular food types in the world and as a result there is always a huge spectrum of foodsstuff involving chocolate and wheat being created. This course will give participants a unique opportunity to learn about chocolate and bakery products where you will be given an opportunity to have some fun making and decorating lots of your own chocolates and bakery products. The art of creating delights such as pralines and chocolate truffles from melted cocoa makes training to be a chocolatier probably one of the most desirable activities you could experience. Participants are going to produce their own handmade chocolates and bakery products using good quality cocoa butter/chocolate and local ingredients where possible.

What should I expect to learn?
Participants will learn about fundamental knowledge on chocolate making and bakery products.
Sabah Geo-tourism Programme:
An Introduction to Geology and Geomorphology of Sabah

Why is this interesting to me?
This is an opportunity to learn and discover the geotourism attractions and the history of the unique geological features of Sabah. This course is the greatest way to get close to nature. It is a way for participants to experience the real beauty of nature and gain the opportunity of a lifetime to marvel the geological and geomorphological processes that create the beautiful and amazing features.

What should I expect to learn?
Participants will appreciate the importance of geological processes and its features that contribute to geotourism and economic development.

Learning Objectives
At the end of the programme, participants shall be able:
- To explain the basic geomorphological process in the earth.
- To understand the formation of geomorphological features.
- To understand the basic concept of geotourism, sustainable tourism, geological heritage and geopark.

How long do I experience learning?
One (1) week

Language Proficiency
The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic/general knowledge and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme
USD1,500 (inclusive of accommodations, food, course materials, insurance, permit fees, field trip and land transportation in Sabah)

FACULTY OF SCIENCE AND NATURAL RESOURCES

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrival and registration of participants and introduction of the course</td>
</tr>
<tr>
<td>2</td>
<td>Briefing and tour of the laboratories</td>
</tr>
<tr>
<td>3</td>
<td>Lecture talk (on various geological fields)</td>
</tr>
<tr>
<td>4</td>
<td>Field work (Quarry visit, Sapi Island, ODEC [subject to availability])</td>
</tr>
<tr>
<td>5</td>
<td>Field trip (Kinabalu Park [subject to availability])</td>
</tr>
<tr>
<td>6</td>
<td>Field Trip (Aquarium and Marine Museum, Hatchery, Sabah Museum [subject to availability])</td>
</tr>
<tr>
<td>7</td>
<td>Discussion and conclusion of the course (including presentation from participants’ representative)</td>
</tr>
</tbody>
</table>

*A certificate of participation will be awarded at the end of the course.

CONTACT PERSONS

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A Guide to Nature Trail Establishment

Why is this interesting to me?

Nature trail or sometimes known as nature walk is one of the activities developed by the park management in order to achieve several objectives.

The trail or trails will go through the park area and highlight the distinct unique characteristics of the park. The main objectives of the nature trail are to increase the knowledge of visitors on the area being visited (i.e. aesthetic, history and the environmental value) and increase environmental awareness among the visitors that can be linked to sustainable tourism or recreation. With the increase in knowledge, understanding and awareness among visitors, the management hope to gain more support from the visitors and surrounding community in their conservation activities.

With regards to this, the development of a nature trail should be planned and designed carefully.

The course will not only involve theory but also hands-on experience in the field that will enhance the understanding of the importance in planning the establishment of nature trail especially in park or protected area.

The knowledge is applicable for personnel who are involved in environmental education, nature tourism or recreation-based service provides.

What should I expect to learn?
The participant will acquire a basic knowledge and experience in planning and developing a nature trail.

Learning Objectives

At the end of the course, participants shall be able:
• To understand the process of nature trails establishment.
• To plan interpretation activities along the nature trail.
• To demonstrate nature trail impact assessment.

How long do I experience learning?

One (1) week

Language Proficiency

The programme will be conducted in the English language. Nonetheless, participants will be given basic exposure to the related ethnic languages.

Participants are required to have basic "What should I expect to learn?" and command of the English language to optimise the learning outcomes of the programme.

Cost of Programme

USD1,530 (Inclusive of accommodations, food, course materials, insurance, permit fees, field trip and land transportation)

FACULTY OF SCIENCE AND NATURAL RESOURCES

Course Activities

<table>
<thead>
<tr>
<th>DAY</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Arrival, registration and check-in of participants</td>
</tr>
<tr>
<td>2</td>
<td>Briefing and introduction on Nature Trails Assessment</td>
</tr>
<tr>
<td>3</td>
<td>Nature Trail Planning</td>
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<tr>
<td>4</td>
<td>Nature Trail Interpretation (guided and non-guided)</td>
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<tr>
<td>5</td>
<td>Trail Impact Assessment</td>
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<tr>
<td>6</td>
<td>Field trip and fieldwork</td>
</tr>
<tr>
<td>7</td>
<td>Discussion and conclusion of the course</td>
</tr>
</tbody>
</table>

* A certificate of participation will be awarded at the end of the course.

CONTACT PERSONS

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Learning Objectives
At the end of this program, participants are expected to:
• Broaden their views, attitudes and ideas about agricultural industries in the topics.
• Get acquainted with diverse cultures and ethnicity.
• Establish networking.

Course Duration
Seven (7) days programme (including the opening and closing ceremony)

Language Proficiency
The course will be conducted in English. However, participants will also learn basic conversational Malay language for interaction with the local community.

Cost of Programme
USD1,200 (Inclusive of accommodations, food, course materials, insurance, permit fees, field trip, and land transportation)

Why is this interesting to me?
In this program, undergraduate students from around the world will have the chance to establish networking in groups and exchange knowledge and ideas in their field of study. The exchange will reflect on various agro-environmental, social and cultural settings and backgrounds of the participants. The Faculty of Sustainable Agriculture (FPL) will host the programme in collaboration with the local agricultural industries to allow participants to experience firsthand the uniqueness of Sabah. This programme will enhance the participants' knowledge and communication skills.

What should I expect to learn?
Participants will be expecting to learn on tropical agriculture and natural setting, various unique cultures in Sabah, and experiencing Sabahan’s hospitality.

Course Activities
This exhilarating 7 days programme comprises scientific, educational, social and multicultural activities. The activities include:
• Reveal skills in propagating Sabah native plants.
• Hand-on activities in a tropical dairy farm.
• Firsthand experience on sustainable oil palm production practices.
And many more activities and exciting places to visit

*A certificate of participation will be awarded at the end of the course.

FACULTY OF SUSTAINABLE AGRICULTURE

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We welcome those who wish to enjoy and experience the beauty of Sabah, the Land Below the Wind.

We are open towards any institutions’ interest in sharing the best of what we can offer. We hope that you have wonderful moments here and will be looking forward to see you again, soon.