

COURSE INFORMATION SHEET

DATE OF ISSUE: February 2024



MALTA UNIVERSITY CONSULTING

AWARD IN PHARMACOGNOSY & HERBAL PRODUCTS

Days/Dates	September 2024: 30 th October 2024: 1 st , 7 th , 8 th , 14 th , 15 th , 21 st , 22 nd , 28 th and 29 th November 2024: 4 th , 5 th , 11 th and 12 th
Time	13:30 - 15:30 (14 Sessions of 2 hours each)
Number of Hours	28 hours
On-site	Campus Hub. Block 'O', Level 5, University of Malta, Msida
Fee	€360 / UM students €345
Deadline	23/09/2024
Accreditation	This course has been approved by the Malta Further & Higher Education Authority (MFHEA) as equivalent to Level 6 (5 ECTS). License No: 2013-FH-019; Further & Higher Education Institution
	Get up to 70% of your Course Fees back: This course has been approved by Malta Enterprise under the Get Qualified Scheme
Aims	Attendees will learn how pharmacognosy has evolved throughout the ages and has developed into a way of life for some patients and consumers. Topics on how the European Union safeguards the European consumer from toxic and harmful natural medicines by a strict directive shall be covered. Due to the distinct classification of herbal substances and preparations into herbal medicines, food supplements and cosmetics, participants are guided on the general characteristics of these herbals from the legal and also scientific points of view to the classification of herbal medicines in accordance with the 2004/24/EC herbals directive that has been now implemented in the general medicine's directive, 2001/83/E. These topics will be discussed in light of the new emerging products and industry related to Medical Cannabis.
Who Should Attend	This course is primarily aimed at Qualified Personnel candidates who work in the pharmaceutical and Medical Cannabis industry having a BSc in Chemistry/Biology, Professionals with a degree in Pharmacy and Pharmacy-related subjects and Postgraduate students reading for a Master's degree in Pathology/Pharmacology.
Course Content	<ul style="list-style-type: none">✓ Introduction to Pharmacognosy: from Tradition to medicine, from illegal to legal✓ Drug Development in the case of Natural Products and synthetic derivatives✓ History of Herbalism and Ethnobotany✓ Legislation: Herbal Products: Medicine or Food?✓ Quality of herbals: What are the requirements.✓ Good Agricultural and Collection Practices, and Good Manufacturing Practices✓ Alternative medicine in modern practice: Herbal Medicine, Aromatherapy and Apitherapy✓ Introduction to Secondary Metabolites: Terpenoids, Glycosides, Flavonoids, Tannins and Alkaloids and principles of Extraction and Processing of secondary metabolites from Plants✓ In vitro and in vivo testing of secondary metabolites from Plants✓ Toxicological aspect of herbal medicinal products: direct effects on humans, and drug-herb interactions✓ The Medicinal Cannabis industry

For further information kindly contact Malta University Consulting Ltd, Campus Hub, Block 'O' Level 7, University of Malta, Msida.

Tel: 21240746; Website: www.maltaconsulting.mt

Email: trainingservices@muhc.com.mt



AWARD IN PHARMACOGNOSY & HERBAL PRODUCTS

Learning Outcomes:

- ✓ Define ethnobotany and discuss the methodology used in this field;
- ✓ Understand the use of herbal medicinal products and natural products available in pharmacies
- ✓ Distinguish between herbal medicines, nutraceuticals (food supplements) and cosmetics with their legislation;
- ✓ Understand these three categories with examples discussed in class;
- ✓ Distinguish between primary and secondary metabolism in terms of role and complexity within the plant species;
- ✓ Distinguish the utilisation of plant species to humans with respect to primary and secondary metabolites;
- ✓ Compare and contrast metabolites falling under different phytochemical classes, particularly terpenoids, alkaloids, flavonoids and shikimate products, tannins, proteins, organic acids, non-flavonoid polyphenolics;
- ✓ Understand the different extraction processes depending on the class of metabolites in question;
- ✓ Understand the importance of pharmacological and toxicological testing for research but also commercialization of herbal medicines;
- ✓ Understand the potential interactions between drugs and herbal medicinal products
- ✓ Understand the problems provoked by poisonous plants due to intentional or unintentional administration of these plants that may have potentially beneficial pharmacological effects at lower doses;

Attendees will be able to:

- ✓ Apply the principles of ethnobotany and devise a protocol for a specific useful plant;
- ✓ Apply legislative definitions to distinguish between herbal medicines, nutraceuticals and cosmetics;
- ✓ Provide advice on herbal medicinal products and natural products available in pharmacies
- ✓ Classify any given compound as a primary or secondary metabolite;
- ✓ Categorise specific compounds into phytochemical classes;
- ✓ Devise an extraction protocol for a given plant with an un/known array of metabolites;
- ✓ Determine the best method of testing for the extract in question;
- ✓ Apply theoretical knowledge to practical and technical issues involving qualitative and quantitative approaches;
- ✓ Discuss the methods of preparation of herbal extracts;
- ✓ Give advice on the preparation of herbal extracts;
- ✓ Discuss with others quality and safety issues of the extract in question;
- ✓ Determine which extracts are safe;
- ✓ Assess a herbal medicine dossier with all the scientific information provided.
- ✓ Assess whether there is sufficient information on the herbal extract to be registered or authorised on the market.
- ✓ Search for information related to ethnobotany and devise a protocol for a specific useful plant;
- ✓ Interpret legislation in terms of herbal medicines, nutraceuticals and cosmetics categorisation;
- ✓ Provide advice on drug-herb interactions
- ✓ Distinguish any given compound as a primary or secondary metabolite;
- ✓ Commence a study on a new plant or herbal extract;

Trainer/s Bio

Prof Everaldo Attard graduated with honours in Pharmacy at the University of Malta (1994) and later furthered his studies on Maltese aromatic and medicinal plants by undertaking a Master of Science degree in Agricultural and Veterinary Pharmacy (1995). He furthered his specialization and obtained a Doctorate in Agriculture from the same University in 2001. Prof Attard has been lecturing in several areas related to medicinal plants and agricultural chemistry at the ex-Institute of Agriculture, Division of Rural Sciences and Food Systems within the Institute of Earth Systems and the Department of Pharmacy at the University of Malta. In 2007 he was officially recognised by the Medicines Authority and appointed as the herbal consultant in assessing herbal medicinal products and food supplements. Since then, he has been the Maltese delegate on the Committee on Herbal Medicinal Products at the European Medicines Agency and the Homeopathic Medicinal Products Working Group of the Heads of Medicines Agencies of the European Union. Prof Attard is the author/co-author of many papers and articles in renowned peer-reviewed medicinal plant journals, articles in professional journals and book chapters.

Certification

Upon successfully completing the course with 80% attendance, attendees will receive an MFHEA Accredited Certificate from Malta University Consulting Ltd.

For further information kindly contact Malta University Consulting Ltd, Campus Hub, Block 'O' Level 7, University of Malta, Msida.

Tel: 21240746; Website: www.maltaconsulting.mt

Email: trainingservices@muhc.com.mt