



# **DIRECT ACCESS**

## **COURSE SPECIFICATIONS**

### **2024 - 2025**

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## **DIRECT ACCESS COURSE INFO**

Year 1 is a foundation course for introducing herbal medicine to students who have either not studied herbs, or science at level 3-5.

In some cases, students who have accredited prior learning in the sciences, or have previous herbal training may enter into Year 2 if they take the Direct Access (DA) course. In some cases, students will also be required to attend the Summer School if they have no previous herbal medicine making experience. All Direct Access students attend the Year 2 crossover day.

The DA course is designed to ensure that the required level of herbal knowledge is obtained to place students on an equal par with their cohort entering Year 2. It also ensures a foundation of safe herbal knowledge to start attending the practitioner clinics.

The modules requiring completion, and the overall deadline is discussed in the application interview, depending on prior learning. A bespoke module package may be selected from the following subjects on a case-by-case basis, depending on previous experience:

- Anatomy & Physiology
- Botany, Growing and Harvesting
- Chemistry & Herbal Constituents
- Herbal Medicine & The Law
- Materia Medica & Herbal Therapeutics

All subjects assigned have an equal weighting and each must be passed (40% pass rate). All assignments must be submitted.

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- Course Administration: [admin@betonica.co.uk](mailto:admin@betonica.co.uk)

## DIRECT ACCESS SUBJECT OVERVIEW

### ANATOMY AND PHYSIOLOGY

**PREREQUISITE:** None

**MAIN AIM:** To provide a basic understanding of human anatomy and physiology.

#### **MAIN TOPICS OF STUDY:**

(In assignment order:)

Introduction to the structure and function of:

1. Anatomical planes, movement and surface anatomy, chemistry basics
2. Muscular-Skeletal System (MSK)
3. Cells & Tissues
4. Nervous System (NS)
5. Skin & Endocrine Systems
6. Gastrointestinal (GIT) & Respiration Systems
7. Cardiovascular (CVS) System
8. Lymph & Immune Systems
9. Reproductive System
10. Urinary & Kidney Systems

#### **WORKBOOKS:**

- Subject Information
- Assignment 1-10 sheets

#### **LEARNING OUTCOMES:**

1. Understand, identify and describe the structure and function of the above systems

#### **TEACHING/LEARNING METHODS/STRATEGIES USED TO ENABLE THE ACHIEVEMENT OF LEARNING OUTCOMES:**

- Course handbooks & materials
- Online Pre-recorded lectures
- Self-led study and research

**ASSESSMENT METHODS [+weightings]:**

- Long & short answer questions/diagram labelling (Monthly) [all add up to 80%]
- Online multiple-choice quizzes (Monthly) [all add up to 20%]

**INDICATIVE READING:**

- Hull, R. (2021). *Anatomy, Physiology, and Pathology* (2nd ed.). Lotus Publishing.
- Waugh, A., & Grant, A. (2018). *Ross and Wilson anatomy and physiology in health and illness* (13th ed.). Elsevier. Older versions are also acceptable

**ADDITIONAL READING (optional):**

- The Anatomy Colouring Book by Kapit and Elson
- Waller, P. (2010). *Holistic Anatomy*. North Atlantic Books.
- Tucker, L. (2015). *An introductory guide to Anatomy and Physiology*.

# **BOTANY, GROWING AND HARVESTING**

**PREREQUISITE:** None

**MAIN AIM:** To provide grounding in botany, growing and harvesting, moving from home to professional use. Working towards building skills for the written and practical botany exams in Year 2.

## **MAIN TOPICS OF STUDY:**

- Taxonomy, classification, naming, families and species (Students will learn the identification of plants and also 10 families in Year 1 to enable a review in year 2 for the final botany exam)
- Plant morphology and anatomy, roots and stems, leaves, flowers, fruits and seeds
- Botanical terminology used to describe plants
- Conservation and ethnobotanical issues as they relate to herbal medicine
- British native plant identification

## **WORKBOOKS:**

- Botany & Plant ID handbook
- Using Plant Scientific Names handbook

## **LEARNING OUTCOMES FOR THE COURSE:**

1. Recognise the plant kingdom and nomenclature of species
2. Name, describe and use basic botanical terminology
3. Be able to use a key to identify medicinal plant species
4. Show understanding of how medicinal plant families are classified and describe some of their unique characteristics.
5. Be able to state the correct botanical names, families as well as common names of the fifty main medicinal plants covered in *Materia Medica* in year 1
6. Identify the fifty main medicinal plants covered in *Materia Medica* in year 1.

## **TEACHING/LEARNING METHODS/STRATEGIES USED TO ENABLE THE ACHIEVEMENT OF LEARNING OUTCOMES:**

- Recorded lecture on plant naming
- Recorded lecture on plant Identification

- Recorded lecture on using a dichotomous key.
- Course handbooks & materials
- Self-led study and research.
- Materia Medica sheet botanical identification

**ASSESSMENT METHODS [+weightings]:**

- Naming Plants Quiz [30%]
- Botany & Plant ID assignment 1 (Botanical Terminology - Long-answer questions) [35%]
- Botany & Plant ID assignment 2 (Using a floral Key) [35%]

**EQUIPMENT NEEDED:**

- Jeweller's Loupe/Hand lens
- Small scalpel/craft knife (optional)

**INDICATIVE READING:**

- Course workbooks and materials
- Rose, F., & O'Reilly, C. (2006). *The wildflower key: How to Identify Wild Plants, trees and shrubs in Britain and Ireland*. Penguin Books, Limited (UK).
- Elpel, T. (2021). *Botany in a day: The patterns method of plant identification* (5th ed.). HOPS Press, LLC.
- Struwe, L., (2016). *Field identification of the 50 most common plant families in temperate regions*. Rutgers. (Available as a download in the Botany folder)

**ADDITIONAL READING (optional):**

- Henk Beentje's Kew Plant Glossary (2012 or 2016). First edition is cheaper and is adequate.
- Jekka McVicar (2009). *Jekka's Complete Herb Book*. Kyle Books.
- Wildflowers of Britain and Ireland (1977) by Roger Phillips (and other volumes, e.g. wild food, trees etc)
- The Collins Complete Guide to British Wildflowers (any edition, but newest is most useful) – recommended but not essential if you have another wildflower book already)
- Poisonous Plants in Great Britain by Fred Gillam

# **CHEMISTRY & HERBAL CONSTITUENTS**

**PREREQUISITE:** None

**MAIN AIM:** To introduce the subject of chemistry & phytochemistry.

## **MAIN TOPICS OF STUDY:**

- Atom structure, isotopes, ions
- Different types of chemical bonding
- Chemical diagrams and formulae
- Properties of water and pH
- Chemical reactions
- Functional groups
- Biological molecules
- Enzymes and DNA
- Basic terms in phytochemistry
- Basic phytochemistry classes

## **WORKBOOKS:**

- Chemistry & Biochemistry workbook
- Intro to Herbal Constituents booklet

## **LEARNING OUTCOMES FOR THE YEAR:**

1. To demonstrate an understanding of atomic structure and bonding in relation to the structure and function of biological molecules (Section 1)
2. To show understanding chemical diagrams and formulae in order to complete appropriate research and learning. (Section 2)
3. To demonstrate understanding of chemical reactions in relation to biological molecules. (Section 3)
4. To understand the basic terms in phytochemistry
5. To demonstrate understanding of plant constituents, their classes and actions.
6. To become familiar with basic herbal constituents in key medicinal herbs

## **TEACHING/LEARNING METHODS/STRATEGIES USED TO ENABLE THE ACHIEVEMENT OF LEARNING OUTCOMES:**

- Course handbook and materials
- Self-led study and research.
- Online videos

**ASSESSMENT METHODS [+weightings]:**

- Chemistry quiz 1 - Atoms & Bonding [25%]
- Chemistry quiz 2 - Functional Groups [25%]
- Herbal Constituents assignment [50%]

**INDICATIVE READING:**

- Course Workbooks and materials
- Hull, R. (2021). *Anatomy, Physiology, and Pathology* (2nd ed.). Lotus Publishing.
- Chevallier, A. (2016). *Encyclopaedia Of Herbal Medicine*. Dorling Kindersley.
- Any British A-Level Chemistry Primer. A good suggestion is a version of: CGP (2015 onwards). *A-Level chemistry - OCR A - Complete revision & practice*. CGP Books

**ADDITIONAL READING (optional):**

- The constituents of medicinal plants by Andrew Pengelly (2004)
- Herbal constituents by Lisa Ganora (2019) (needed for Y2, but Ganora-related Y1 materials are scanned on the Learning Platform)

# HERBAL MEDICINE AND THE LAW

**PREREQUISITE:** None

**MAIN AIM:** To introduce the subject and focus on the introduction to the history and laws relating to the practice of herbal medicine.

## MAIN TOPICS OF STUDY:

- Herbal Law

## WORKBOOKS:

- Herbal Medicine And The Law handbook
- Many Worlds of Herbal Medicine handbook

## LEARNING OUTCOMES FOR THE YEAR:

1. Demonstrate an understanding of the laws surrounding herbal medicine to enable working legally and ethically.

## TEACHING/LEARNING METHODS/STRATEGIES USED TO ENABLE THE ACHIEVEMENT OF LEARNING OUTCOMES:

- Course handbooks & materials
- 2 x Recorded lectures by Chris Etheridge
- Self-led study and research

## ASSESSMENT METHODS [+weightings]:

- Herbal medicine and the law scenario quiz [50%]
- Many worlds of herbal medicine written assignment (750 words) [50%]

## INDICATIVE READING:

- Course Workbooks and materials
- Chevallier, A. (2016). *Encyclopaedia of herbal medicine*. Dorling Kindersley.
- Griggs, B. (1997). *Green pharmacy: The history and evolution of Western herbal medicine*. Healing Arts Press.

## ADDITIONAL READING (optional):

- Please see the online library (Learning platform>Introduction>online library) for a list of open access historical herbals
- Culpeper's complete herbal

- Culpeper's Medicine: A Practice of Western Holistic Medicine by Graeme Tobyn
- The Herbalist's Bible: John Parkinson's Lost Classic Rediscovered by Julie Bruton-Seal
- Hatfield's Herbal by Gabrielle Hatfield
- The Modern Herbal (1931) By Maude Grieve. Available at [www.botanical.com](http://www.botanical.com)
- The Physicians of Myddfai: Or, the Medical Practice of the Celebrated Rhiwallon and His Sons, of Myddfai, in Carmarthenshire by John Williams
- Welsh herbal medicine by David Hoffmann
- History, Philosophy and Medicine by Julian Barker
- Herbal Exchanges by Hananja Brice-Ytsma and Frances Watkins

# MATERIA MEDICA AND HERBAL THERAPEUTICS

**PREREQUISITE:** None

**MAIN AIM:** To introduce the subject of Materia Medica

## **MAIN TOPICS OF STUDY:**

- The structure of the Materia Medica framework for evaluating herbs
- The focused study of the following medicinal plants:
  1. ARTICHOKE | *Cynara cardunculus* L.
  2. BORAGE | *Borago officinalis* L.
  3. CALENDULA | *Calendula officinalis* L.
  4. CENTAURY | *Centaurium erythraea* Rafn.
  5. CHAMOMILE | Roman = *Chamaemelum nobile* (L.) All.; German = *Matricaria chamomilla* L.
  6. CHICKWEED | *Stellaria media* (L.) Vill.
  7. CHILLI | *Capsicum annuum* L.
  8. CLEAVERS | *Galium aparine* L.
  9. CLOVE | *Syzygium aromaticum* (L.) Merr. & L.M.Perry
  10. CRAMP BARK | *Viburnum opulus* L.
  11. DANDELION | *Taraxacum officinale* (L.) Weber ex F.H.Wigg.
  12. ECHINACEA | *Echinacea angustifolia* DC.; *E. pallida* (Nutt.) Nutt.; *E. purpurea* (L.) Moench
  13. ELDER | *Sambucus nigra* L.
  14. ELECAMPANE | *Inula helenium* L.
  15. EYEBRIGHT | *Euphrasia officinalis* L.
  16. FENNEL | *Foeniculum vulgare* Mill.
  17. FEVERFEW | *Tanacetum parthenium* (L.) Sch.Bip.
  18. GARLIC | *Allium sativum* L.
  19. GINGER | *Zingiber officinale* Roscoe
  20. GINKGO | *Ginkgo biloba* L.
  21. GROUND IVY | *Glechoma hederacea* L.
  22. HAWTHORN | *Crataegus* spp.
  23. HORSE CHESTNUT | *Aesculus hippocastanum* L.

24. HYSSOP | *Dracocephalum officinale* (L.) Y.P.Chen & B.T.Drew (syn. *Hyssopus officinalis* L.)

25. JUNIPER | *Juniperus communis* L.

26. LEMON BALM | *Melissa officinalis* L.

27. LIME FLOWER | *Tilia cordata* Mill.; *T. × europaea* L.; *T. platyphyllus* Scop.

28. MARSHMALLOW | *Althaea officinalis* L.

29. MEADOWSWEET | *Filipendula ulmaria* (L.) Maxim.

30. MILK THISTLE | *Silybum marianum* (L.) Gaertn.

31. MOTHERWORT | *Leonurus cardiaca* L.

32. MUGWORT | *Artemisia vulgaris* L.

33. MULLEIN | *Verbascum thapsus* L.

34. MYRRH | *Commiphora myrrha* (T.Nees) Engl.

35. NETTLE | *Urtica dioica* L.

36. OAT | *Avena sativa*

37. PEPPERMINT | *Mentha × piperita* L.

38. PLANTAIN | *Plantago lanceolata* L.; *P. major* L.; *P. media* L.

39. ROSEMARY | *Salvia rosmarinus* Spenn.

40. SAGE | *Salvia officinalis* L.

41. SILVER BIRCH | *Betula pendula* Roth.

42. SKULLCAP | *Scutellaria lateriflora* L.

43. SWEET FLAG | *Acorus calamus* L.

44. THYME | *Thymus vulgaris* L.

45. VALERIAN | *Valeriana officinalis* L.

46. WHITE WILLOW | *Salix alba* L.

47. WOOD BETONY | *Betonica officinalis* L.

48. WORMWOOD | *Artemisia absinthium* L.

49. YARROW | *Achillea millefolium* L.

50. YELLOW DOCK | *Rumex crispus* L.

#### WORKBOOKS:

- 50 x Materia Medica sheets
- Herbal Actions & Indications Handbook
- Herbal Abbreviations sheet

#### LEARNING OUTCOMES FOR THE YEAR:

1. Understand terminology including actions, indications, contraindications, herbal abbreviations and plant part terminology (radix, flos. etc.)
2. Demonstrate knowledge and understanding of the Materia Medica: latin and common names, parts used, actions, including differentiating between internal vs. external/topical actions, indications, contraindications

3. Demonstrate knowledge of a wide range of medicinal plants
4. Demonstrate understanding of herbal safety
5. Demonstrate understanding of basic herbal constituents for key herbs
6. Demonstrate correct ability to handle plant scientific naming, including up-to-date scientific names.
7. Critically evaluate herbal use

**TEACHING/LEARNING METHODS/STRATEGIES USED TO ENABLE THE ACHIEVEMENT OF LEARNING OUTCOMES:**

- Course handbooks & materials
- Self-led study and research

**ASSESSMENT METHODS [+weightings]:**

- Herbal Actions & Indications quiz [25%]
- 1 x Materia Medica Quizzes (30 mins) [60%]
- 1 x Self-Study Herb Monograph [15%]

**INDICATIVE READING: (these are useful sources be used again in subsequent years)**

- Course Workbooks and materials
- McIntyre, A. (2019). *The complete herbal tutor* (2nd ed.). AEON Books.
- Fisher, C. (2018). *Materia Medica of Western herbs*. Aeon Books.
- Kress, H. (2018). *Practical herbs* (Vols 1 & 2). AEON Books.
- Botany Books for ID.

**ADDITIONAL READING (optional):**

- Hedgerow Medicine by Julie and Matthew Seal
- The Complete Illustrated Holistic Herbal by David Hoffmann
- Jekka McVicar (2009). *Jekka's complete herb book*. Kyle Books.