Module Specification

Investigating and Communicating Science

Version: 2025-26, v2.0, Approved

Contents

Part 1: Information

Module title: Investigating and Communicating Science

Module code: USSKCM-30-0

Level: Level 3

For implementation from: 2025-26

UWE credit rating: 30

ECTS credit rating: 15

College: College of Health, Science & Society

School: CHSS School of Applied Sciences

Partner institutions: None

Field: Applied Sciences

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: The module develops understanding and proficiency for essential concepts and skills in science theory, practice and communication.

Features: Not applicable

Educational aims: The module will introduce students to the nature and processes of science and how it is communicated in a variety of forms and to different

audiences. Students will gain theoretical insight and practical experience to develop a basic toolkit of skills ready for degree-level study.

Outline syllabus: The indicative syllabus is as follows:

SUBJECT CONTENT
Nature of science and science investigation
How to find, read and understand academic literature
The relationship between science and society
Ethics and equity in science
Public speaking
Scientific reasoning
Visual communication and data visualisation
Argumentation and narrative

SKILLS
Use of library systems for scientific study
Researching a topic
Academic reading, writing and oracy
Referencing and citation
Analysis and presentation of scientific information and data
Critical thinking
Group working
Independent study
Time management and planning
Reflective practice

Part 3: Teaching and learning methods

Teaching and learning methods: Lectures:
Introducing core concepts, knowledge and theory.

Practicals:

Interactive workshops to develop proficiency and confidence with skills, techniques through a variety of facilitated activities.

Independent pre-and post-session work:
Students will be directed to specific pre-session reading or other preparation materials, plus post-session materials to consolidate learning and deepen understanding.

Independent learning includes hours engaged with essential reading, assignment preparation and completion. Students will be given support to develop independent learning skills through the workshops.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Demonstrate knowledge and understanding of how and why we do science, including in a wider social context.

MO2 Apply appropriate digital tools to presentations and writing; literature searches, data analysis and visualisation; time management and planning.

MO3 Communicate science verbally as part of a team to an audience of peers.

MO4 Select, evaluate and apply academic sources to written communication of ideas, arguments and conclusions.

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/usskcm-30-0.html

Part 4: Assessment

Assessment strategy: Assessment 1: Presentation (10 minutes, plus 5 minutes Q+A)
Students will work in small, programme-based groups to research, design and deliver a ten-minute, face-to-face presentation followed by five minutes of questions. They will choose from a selection of contemporary, real-world, science-based topics, and will be provided with a small selection of relevant sources to start.

Oracy is a highly sought-after professional skill and a feature of all degree courses within Applied Sciences at UWE. This assessment promotes positive, collaborative working and social connection at an early stage in their university journey, developing confidence along with an awareness of inclusive practice.

Students will be guided in how to work as a team, plan and create their presentations through linked interactive workshops, including opportunities for ideas development and formative feedback. Short, weekly exercises will enable students to consolidate skills and reflect on learning, evidencing how it has been applied to their presentation.

Assessment 2: Written Assignment (2000 words maximum)
An academic writing portfolio. Students will produce an essay on a topic of their choosing that aligns with their own interests, experience and future programme of study.

They will be guided to define a suitable question and develop essay content through a series of themed workshops and structured weekly exercises that model the stages of the research and writing process.

Exercises will vary in nature and will create an environment of supported challenge, with regular opportunities for formative feedback and linked personal tutoring sessions. Together they will reduce the pressure of a single, end-of-term assessment and increase accessibility.

This process-oriented assessment integrates learning, builds a capacity for

independent, self-directed study and develops key skills important for academic study and professional workplaces.

Inclusivity is promoted through a self-determined topic that values and recognises students' existing skills and experience, coupled with an opportunity for these to be meaningfully applied to a sustained piece of writing that provides a sense of achievement and builds confidence.

Assessment tasks:

Presentation (First Sit)
Description: Presentation, with evidence of development (15 minutes).
Weighting: 50 %
Final assessment: No
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3

Written Assignment (First Sit)
Description: Essay on investigation of science (2000 words).
Weighting: 50 %
Final assessment: Yes
Group work: No
Learning outcomes tested: MO1, MO2, MO4

Presentation (Resit)
Description: Presentation, with evidence of development (15 minutes).
Weighting: 50 %
Final assessment: No
Group work: Yes
Learning outcomes tested: MO1, MO2, MO3

Written Assignment (Resit)
Description: Essay on investigation of science (2000 words).
Weighting: 50 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Environmental Science {Foundation} [Frenchay] BSc (Hons) 2025-26

Wildlife Ecology and Conservation Science {Foundation} [Frenchay] BSc (Hons) 2025-26

Forensic Science {Foundation} [Frenchay] BSc (Hons) 2025-26

Biological Sciences {Foundation} [Frenchay] BSc (Hons) 2025-26

Biomedical Science {Foundation} [Frenchay] BSc (Hons) 2025-26

Biological Sciences {Foundation} [Frenchay] BSc (Hons) 2025-26

Environmental Science {Foundation} [Frenchay] BSc (Hons) 2025-26