



UNSW Course Outline

BIOS6723 River Basin Ecosystem Management - 2024

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General Course Information

Course Code : BIOS6723

Year : 2024

Term : Term 2

Teaching Period : T2

Is a multi-term course? : No

Faculty : Faculty of Science

Academic Unit : School of Biological, Earth and Environmental Sciences

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : See School

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

This course is an intensive field-based course in Botswana's Okavango Delta, one of the world's hotspots of biodiversity, a UNESCO World Heritage site. Students will take the course with students and staff from Arizona State University and Kings College London, part of the PLuS

Alliance. The Okavango Delta has extensive wetland systems with diverse waterbird populations, vegetation communities, the largest population of elephants in Africa and large predators, including lions and leopards. This diverse ecosystem lies at the end of one of the world's last few large free-flowing rivers. This course involves practical concepts of river basin ecosystem conservation, management and governance. The overall aim of the course is to tackle a global challenge in a developing country of the world, focusing on sustainability of biological and abiotic processes within the context of human drivers of development.

Students need to arrive in Maun (Botswana) on the 1 July 2023 and leave on the 10 July 2023. While in Botswana, there is a fee of \$AUD 1,900 which covers all airport transfers and local guides, accommodation, transport and food. Travel to and from Botswana is at the expense of individual students. There is limited capacity in this course: students need to apply with relevant backgrounds.

Course Aims

The aim of this course is to understand the challenges of conservation management of an internationally important river basin whose catchment spans three countries. It is designed to demonstrate excellence in international education, a distinctive educational experience. It involves partnering with many different institutions, incorporating elements of social engagement and practical field skills. The course is designed to allow reflection and development of critical and practical thinking, stimulating students to consider a holistic approach, involving diverse stakeholders.

Course Learning Outcomes

Course Learning Outcomes
CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.
CL02 : Develop an adaptive management plan relevant to the social and ecological dimensions of the Okavango River Basin.
CL03 : Conduct field surveys for relevant river basin indicator species on riparian and aquatic ecosystems.
CL04 : Communicate complex conservation management strategies to diverse stakeholders.
CL05 : Develop identification skills for wildlife, plant and animal surveying.

Course Learning Outcomes	Assessment Item
CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.	<ul style="list-style-type: none"> • River basin environmental adaptive management plan • Field trip skills • Field surveys of river basin ecosystem indicator species • Organisms, process, and people of the Okavango River basin
CL02 : Develop an adaptive management plan relevant to the social and ecological dimensions of the Okavango River Basin.	<ul style="list-style-type: none"> • River basin environmental adaptive management plan
CL03 : Conduct field surveys for relevant river basin indicator species on riparian and aquatic ecosystems.	<ul style="list-style-type: none"> • Field trip skills • Field surveys of river basin ecosystem indicator species • River basin environmental adaptive management plan
CL04 : Communicate complex conservation management strategies to diverse stakeholders.	<ul style="list-style-type: none"> • River basin environmental adaptive management plan
CL05 : Develop identification skills for wildlife, plant and animal surveying.	<ul style="list-style-type: none"> • Organisms, process, and people of the Okavango River basin • Field trip skills • Field surveys of river basin ecosystem indicator species

Learning and Teaching Technologies

Moodle - Learning Management System

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
River basin environmental adaptive management plan Assessment Format: Individual Short Extension: Yes (7 days)	50%	Start Date: Not Applicable Due Date: Not Applicable
Field trip skills Assessment Format: Individual	10%	Start Date: Not Applicable Due Date: Not Applicable
Field surveys of river basin ecosystem indicator species Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Not Applicable
Organisms, process, and people of the Okavango River basin Assessment Format: Individual	10%	

Assessment Details

River basin environmental adaptive management plan

Assessment Overview

You will be required to develop an adaptive management plan for the Okavango River Basin (1500 words), which identifies the context, vision and goals, monitoring schedule and reporting and outreach. The assessment will need to be submitted within four weeks of the completion of the field course.

Students will receive written feedback within 2 weeks of their submission.

Course Learning Outcomes

- CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.
- CL02 : Develop an adaptive management plan relevant to the social and ecological dimensions of the Okavango River Basin.
- CL03 : Conduct field surveys for relevant river basin indicator species on riparian and aquatic ecosystems.
- CL04 : Communicate complex conservation management strategies to diverse stakeholders.

Detailed Assessment Description

You will be required to develop an adaptive management plan for the Okavango River Basin (1500 words), which identifies the context, vision and goals, monitoring schedule and reporting and outreach. The assessment will need to be submitted within four weeks of the completion of

the field course.

Students will receive written feedback within 2 weeks of their submission.

Assessment Length

1500 words

Assessment information

You will be required to develop an adaptive management plan for the Okavango River Basin (1500 words), which identifies the context, vision and goals, monitoring schedule and reporting and outreach. The assessment will need to be submitted within four weeks of the completion of the course.

Field trip skills

Assessment Overview

In this practical test, using photographs, you will be tested on your learnt identification skills encountered during surveys of fauna and flora of the Okavango River basin, towards the end of the field course.

Course Learning Outcomes

- CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.
- CL03 : Conduct field surveys for relevant river basin indicator species on riparian and aquatic ecosystems.
- CL05 : Develop identification skills for wildlife, plant and animal surveying.

Detailed Assessment Description

In this practical test, using photographs, you will be tested on your learnt identification skills encountered during surveys of fauna and flora of the Okavango River basin, towards the end of the field course.

Assessment information

In this practical test, using photographs, you will be tested on your learnt identification skills encountered during surveys of fauna and flora of the Okavango River basin, towards the end of the field course.

Field surveys of river basin ecosystem indicator species

Assessment Overview

You will be engaged in field surveys throughout the course, where you will need to contribute to

the identification and collection of data on individual species and their distribution. Your contribution to providing these data for your group will be assessed during the survey work in the Okavango Delta. Feedback is constantly provided on sampling and identification by academic staff.

Course Learning Outcomes

- CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.
- CL03 : Conduct field surveys for relevant river basin indicator species on riparian and aquatic ecosystems.
- CL05 : Develop identification skills for wildlife, plant and animal surveying.

Detailed Assessment Description

You will be engaged in field surveys throughout the course, where you will need to contribute to the identification and collection of data on individual species and their distribution. Your contribution to providing these data for your group will be assessed during the survey work in the Okavango Delta. Feedback is constantly provided on sampling and identification by academic staff.

Assessment information

Students will be split into the three groups (representing Angola, Botswana and Namibia) to deliver a group presentation focusing on river basin management and its impacts. Each group will give a presentation at the end of the course to an audience of (faux) stakeholders, before a Q&A with your group immediately after your presentation.

Organisms, process, and people of the Okavango River basin

Assessment Overview

You will be expected to research the ecological and social values of the Okavango River Basin and present a short 3 minute talk to other students at the beginning of the course.

Course Learning Outcomes

- CL01 : Evaluate data in relation to social and ecological values for holistic management of large scale river basins.
- CL05 : Develop identification skills for wildlife, plant and animal surveying.

Detailed Assessment Description

You will be expected to research the ecological and social values of the Okavango River Basin and present a short 3 minute talk to other students at the beginning of the course.

Assessment information

You will research a topic related to the ecological and social values of the Okavango River Basin and present a short 3 minute talk/ presentation to other students at the beginning of the course. (A projector/ laptop will be available, and you should [sign-up here](#) to choose your topic)

General Assessment Information

Grading Basis

Standard

Course Schedule

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Richard Kingsford					No	Yes
	Neil Jordan					No	No

Other Useful Information

Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.
- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the [UNSW Student Code of Conduct Website](#).

Academic Honesty and Plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at <https://student.unsw.edu.au/referencing>

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The [Current Students site](#),
- The [ELISE training site](#), and
- The [Use of AI for assessments](#) site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>

Submission of Assessment Tasks

Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Any variations to the above will be explicitly stated in the Course Outline for a given course or assessment task.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: <https://student.unsw.edu.au/special-consideration>

Important note: UNSW has a “fit to sit/submit” rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

Faculty-specific Information

Additional support for students

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)
- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)