



PowerPoint Multimedia

This booklet and the accompanying CD demonstrate multimedia resources created by Faculty of Science, Engineering and Technology lecturers for their undergraduate students.

It can be difficult to effectively integrate video, audio, and colour images for use in undergraduate teaching. Through a faculty project 32 lecturers have learnt how to make basic PowerPoint multimedia resources to enhance their practicals and excursions. Most of the examples that follow have been used already and were very well received by students.

“It was easy to use and it was visual which is good for me”

First year Aquaculture student



Foreword



Jim Reid

The PowerPoint multimedia project serves as a model of how inter-disciplinary projects across schools can lead to major innovations in teaching and learning. It has addressed the need to provide alternative and flexible ways to give students access to the field and practical experience via the use of integrated video, audio and colour images.

Looking through the resources I obtained a real feel for the sites and organisms covered. Student feedback strongly supports the benefits of the resources to back-up and build onto their other learning experiences.

Jim Reid
Dean, Science, Engineering & Technology



Basic

The best way to find out about these resources is have a look. Load the CD and open the file 'PowerPoint_Multimedia'. Normally when a student puts in a resource CD it would start automatically - but we want you to see that it is indeed a PowerPoint slideshow.

PowerPoint is a great lecture tool, but as you'll see equally useful for conveying multimedia information to the individual student. Lecturer time is precious so we have been offering technical assistance. Most of the examples have taken about 3 days of lecturer time, and 10 days of assistant time to develop. Using the templates created as part of this project any PowerPoint competent person can provide the necessary technical assistance.

Load the CD to view the following examples.



Urban Planning
Space, Place and Society
Dr Elaine Stratford
Geography and Environmental Studies

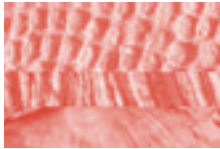
Elaine's urban planning resource evolved to support students in group-based fieldwork in various municipalities of the city of Hobart.

The resource provides students with an informative virtual tour of Hobart Metropolitan Area, accounting for spatial and temporal changes, urban processes and planning issues.

It familiarises students with parts of the city they might not otherwise see, provides opportunities to 'read' the landscape and interpret its many meanings, and is a useful background resource for a major assignment.



“Using a multimedia format enables us to show students elements of the local geology that would not be possible on conventional field excursions”



Introduction to the

Geology of Southeast Tasmania

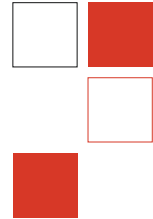
Dr Michael Roach - Earth Science

This is an extensive PowerPoint based teaching and learning package to introduce the varied geology of southeast Tasmania. Using local information gives students an experience they could never get from a textbook.

The aim of the package is to provide comprehensive information reinforced by visual images to describe all aspects of southeast Tasmanian geology. Michael created his resource without any assistance after an initial workshop.

Zoology 2 Field Trip

Dr Mark Hindell - Zoology



This project enabled Mark to develop material to supplement a Fortesque Bay field trip. On their return, students were able to review species, habitats, methodology, and also use additional data and worked examples in later quantitative practicals.

The field trip introduced students to a range of animal handling and survey techniques. After participating in the excursion and reviewing the resource, it is hoped students can explain the factors that influence animal distribution using Tasmanian examples.





Key to Tasmanian DICOTYLEDONS

Dr Greg Jordan - Plant Science

The resource is developed as an interactive key to the Tasmanian dicots. Previously students used a more difficult paper-based key. Keying is an important exercise because it develops the observation skills of the students in a directed way.

The key is an important step forward for Tasmanian plant science. In addition to its use in teaching, the CD will be distributed to academics, other scientists, and the interested public.

“ It will help students overcome the traditional barrier in identifying plants - recognising the important features.”



Tasmanian Weed Database

Dr Peter Lane - Agricultural Science

The Tasmanian Weed Database was developed as a handy way to find information on common weed species. Students navigate by common name or scientific name, through a basic key.

Data has been gathered from a variety of sources with more to be added each year. The aim is that students will be able to identify common Tasmanian weeds for weed collection and casual use, and collate additional information on Tasmanian weeds. Information collected by students will be added to the database, making it better for subsequent years.

“This multimedia approach was a very successful learning tool for my first year students.”



Atlas of Histology, Dissections & Aquatic Animal Life-History Stages

Dr Tish Pankhurst
School of Aquaculture

The Aquatic Animal Atlas was developed to support the practical component of Aquatic Zoology. Using the resource, students learn the taxonomic phylogenetic associations between groups and view examples of species differences and similarities in and between groups.

The resource covers various aspects of dissection and histology using video and good quality pictures. At the end of the unit students are tested using the same material.



How to

There are instructions on how to create your own resources
online at www.agsci.utas.edu.au/ppmultimedia

The website explains: templates, hyperlinks, interactivity,
assessment, multimedia, saving time, student feedback, and layout

Until January 2004 you can also contact
Simon James on 03 6226 7468 to discuss the project

Project participants

Agricultural Science Neville Mendham, Martin Line, Dugald Close, Peter Lane, Phil Brown, Rob Clark, Tom Ross, Richard Doyle **Zoology** Sue Jones, David Ritz, Mark Hindell, Leon Barmuta **Plant Science** Gustaaf Hallegraeff, Rob Wiltshire, Greg Jordan, Brad Potts, Paddy Dalton, **Geography and Environmental Studies** Jon Osborn, Elaine Stratford, Emma Pharo, Werner Hennecke, Tony Sprent, Richard Coleman, Michael Lockwood **Earth Science** Andrew Tunks, Michael Roach, James Reid **Aquaculture** Tish Pankhurst, Barbara Nowak, Chris Carter, John Purser, Natalie Moltschaniwskyj
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Up-to-date contact details can be found on the web site at
www.agsci.utas.edu.au/ppmultimedia
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