IMT 4891 - Digital Workflow Fundamentals

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#1: Course Introduction

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Welcome!

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[Students not on this list need to pay the admission fee, register as students and accept the study plan to become active students in our systems, including Fronter]

FRONTER

fronter.hig.no > imt4891

WEB

http://www.ansatt.hig.no/kjellr/imt4891/

Photo: Anne Mette Bjørgen, 2009 CC: BY|NC|SA

1988-89	hifm.no	it studies
1989-93	hiof.no	it studies
1993-94	hil.no/it	it consultant
1994-07	hil.no/sell	mm producer
2005-08	uninett.no	advisor
2006-09	hiof.no	it studies
2009-	hig.no/imt hig.no/it	lecturer it advisor

imt4891?

34	Introductions	Computer history Intellectual Property Rights and Creative Commons
35	Collect and describe data	
36	Transform, compress, encode data	
37	Move and store data	
38	Workflow automation	
39	Academic writing using LaTex and Bibtex	
40	Intellectual Property Rights	
41	-	
42	Exam	


LAWRENCE
LESSIG
FREE CULTURE
HANDBOOK
Learning the Unix Operating System
TOOLS FOR THOUGH

ambitions for this course

Make you robust through exposure to new systems, ideas and methods and have them challenge the ones you already know

Make you educated through a mix of theory/history and practical relevant exercises

Have fun along the way.

~1 minute

- Name
- Background
  - Country
  - Prior education/work
  - Computer experience
- Course expectations
- Master expectations
- Plans for the future

torsdag 27. august 2009

open and free

OPERATING SYSTEMS UNIX	**PROGRAMS** exiftool, imagemagick, gpsbabel, +++
DATA FORMATS latex, bibtex, kml, png,	**PROGRAMMING ENVIRONMENT** shell scripting

methods

Fronter

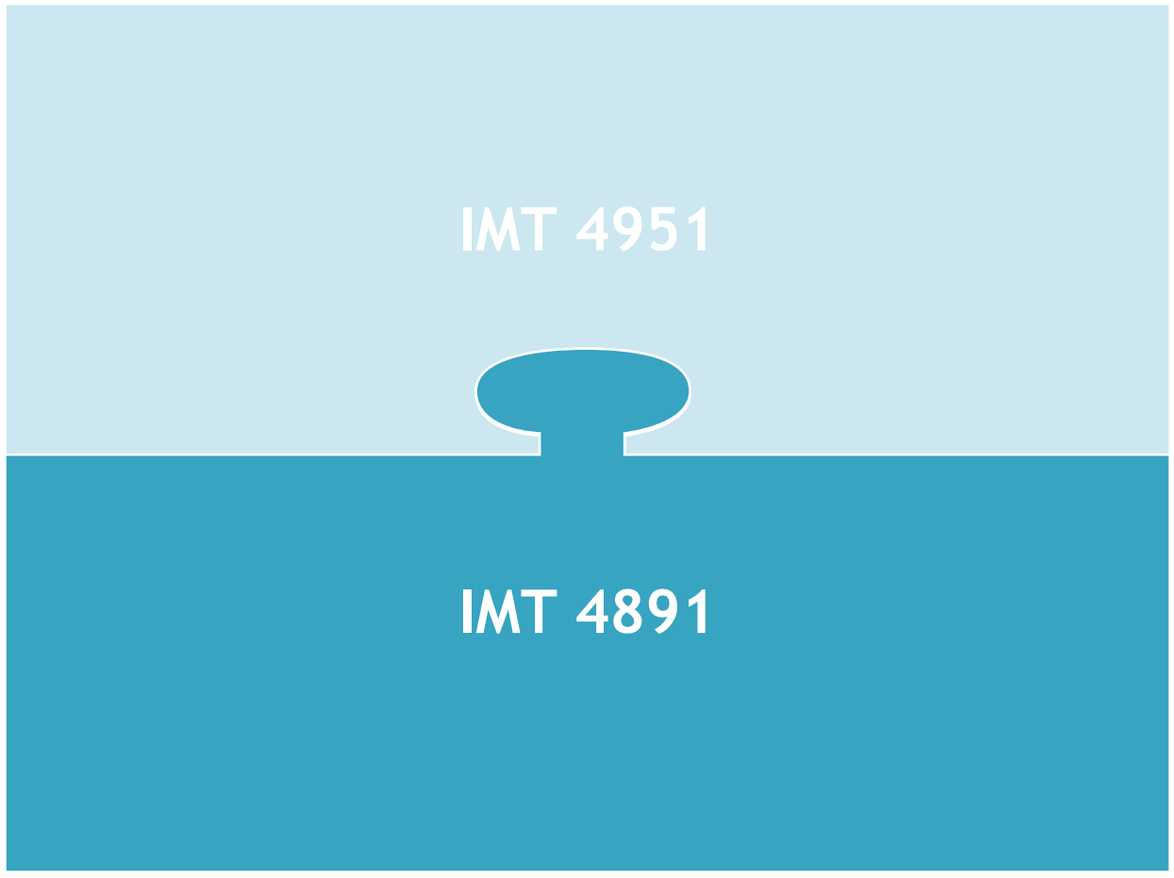
Web

Handheld

Audio/
video of
lectures

Mandatory
exercises

Lab
sessions



Apply knowledge and skills through completing a workflow-related project

Learn the fundamentals skills and knowledge


Terminal — bash
Last login: Fri Jun 26 10:41:56 on ttys001
refsvik$ find ./ -name *.jpg | wc -l
refsvik$

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Lecture 1
me and my background, the course, my methods,
students. where do they come from and what are their expectations?
practicalities: web, fronter, lab, pandemics planning
principles: open, free, independant solutions. This after my "sustainable" master
use photographs as a data type but try to make the
make the course content relevant to any data type
use CLI software to provide you with an alternative
approach to the one(s) that you probably use today.
goal? train you to be robust computer users able to solve any problem in any sit
Lecture 2
examples run in a UNIX CLI environment to expose you to an alternative
computing platform.
also: investment in time spent now is probably applicable in 20-40 years time
demo: ssh, wget, lynx, find, grep,
devices: sound, images, video, photo and geo
storage: tape, cards, discs
until next time: start reading, and explore the links on the page.
also: make sure you get to know Fronter. We will use the deliver functionality
this lecture series (as well as in the follow-up course) will be recorded
compression will probably be reduction of frame size to 0.5X and 1fps in mpeg4.
audio is done with a cordless mike to get better sound.
as uncomfortable this is, we will try it out for your as well as my benefit this
semester. You get to repeat lecture - I get the flexibility of
Lecture 3
Data capture
Data and metadata
Raw and abundant
Photos: RAW or RAW+JPG if you can
Makes you able to go back and edit
Same with sound and video
Why metadata?
Types
Package methods (XML)
Human and machine collection
Photos: who/what, when, where, usage/rights
Standards: exif, iptc_iim,
exiftool (despite the name, can read and write a lot of formats/standards)

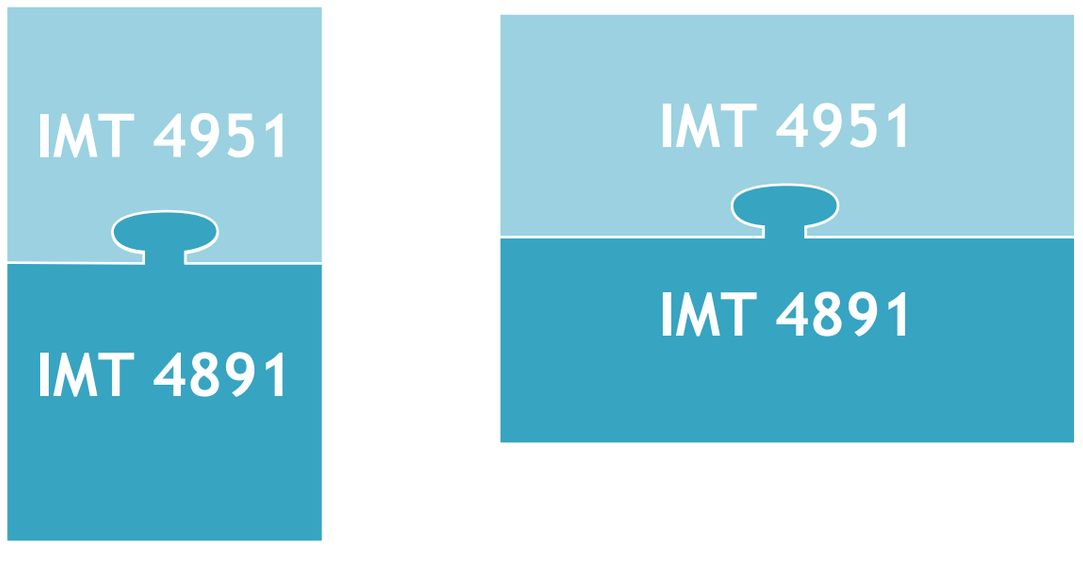
Lecture

Computing history

Historic periods and trends

User interface metaphors

Open vs closed



Why on earth do we expose you to a seemingly old and arcane interface to a computer? command-line UNIX and shell-scripts???

To be able to process data on a remote machine

To become a **robust** student in the sense that you know how to use UNIX and CLI and make effective workflows using shell-scripts

To be able to attach problems that may be difficult or time-consuming in a GUI paradigm

Use any machine

Be independant of special commercial software packages

UNIX operating systems run a large amount of machines today - from large server farms to mobile phones.

Video and audio?

This course is mainly limited to processing images and text. However - on a practical level, this course is all about recording sound and video as well.

I will describe how that is done, and the reasons behind the choises of equipment and software that is used in this course.

Codecs and formats

hardware

Automation

Compression/fps

Perfect vs Good

Bandwidth

Sound vs video

Perfect vs Good

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