

COMMUNICATION TECHNOLOGY

SECTION J: SAMPLE STUDENT LEARNING GUIDES

The following pages provide background information, strategies and a template for developing student learning guides. Also included at the end of this section are several sample student learning guides for Communication Technology.

A student learning guide provides information and direction to help students attain the expectations defined in a specified CTS module. It is designed to be used by students under the direction of a teacher.

Many excellent student learning guides (SLGs) are available for use and/or are in the process of being developed. While Alberta Education provides a development template accompanied by some samples, most student learning guide development is being done by individuals and organizations across the province (e.g., school jurisdictions, specialist councils, post-secondary organizations). Refer to the *Career & Technology Studies Manual for Administrators, Counsellors and Teachers* (Appendix 11) for further information regarding student learning guide developers and sources.

Note: A student learning guide is not a self-contained learning package (e.g., Distance Learning Module), such as you might receive from the Alberta Distance Learning Centre (ADLC) or Distance Learning Options South (DLOS).

TABLE OF CONTENTS

BACKGROUND INFORMATION	J.3
Components of a Student Learning Guide	J.3
Strategies for Developing Student Learning Guides	J.4
SAMPLE STUDENT LEARNING GUIDE TEMPLATE	J.5
SAMPLE STUDENT LEARNING GUIDES	
COM1030 Photography 1.....	J.11
COM2060 Photographic Techniques 1	J.17
COM2090 Audio/Video 1	J.23

BACKGROUND INFORMATION

A Student Learning Guide (SLG) is a presentation of information and direction that will help students attain the expectations defined in a specified CTS module. It is designed to be used by students under the direction of a teacher. A SLG is not a self-contained learning package such as you might receive from the Alberta Distance Learning Centre (ADLC) or Distance Learning Options South (DLOS).

Each SLG is based on curriculum and assessment standards as defined for a particular CTS module. Curriculum and assessment standards are defined in this document through:

- module and specific learner expectations (Sections D, E and F)
- assessment criteria and conditions (Sections D, E and F)
- assessment tools (Section G).

The SLG is written with the student in mind and makes sense to the student in the context of his or her CTS program. SLGs are designed to guide students through modules under the direction of the teacher. They can be used to guide:

- an entire class
- a small groups of students
- individual students.

In some instances, the Student Learning Guide may also be used as teacher lesson plans. When using SLGs as teacher lesson plans, it should be noted that they tend to be:

- learner-centred (versus teacher-directed)
- activity-based (versus lecture-based)
- resource-based (versus textbook-based).

Components of a Student Learning Guide

The student learning guide format, as developed by Alberta Education, typically has *seven* components as described below.

1. *Why Take This Module?*

This section provides a brief rationale for the work the student will do, and also establishes a context for learning (i.e., in relation to the strand, a life pursuit, a specific industry, etc.).

2. *What Do You Need To Know Before You Start?*

In this section, prerequisite knowledge, skills and attitudes considered necessary for success in the module are identified. Prerequisites may include other modules from within the strand or from related CTS strands, as well as generic knowledge and skills (e.g., safety competencies, the ability to measure/write/draw, prior knowledge of basic information relevant to the area of study).

3. *What Will You Know And Be Able To Do When You Finish?*

This information must parallel and reflect the curriculum and assessment standards as defined for the module. You may find it desirable to rewrite these standards in less formal language for student use.

4. *When Should Your Work Be Done?*

This section provides a timeline that will guide the student in planning their work. The timeline will need to reflect your program and be specific to the assignments you give your students. You may wish to include a time management chart, a list of all assignments to be completed, and instructions to the student regarding the use of a daily planner (i.e., agenda book) to organize their work.

5. *How Will Your Mark For This Module Be Determined?*

This section will interpret the assessment criteria and conditions, assessment standards, assessment tools and suggested emphasis as defined for the module within the context of the projects/tasks completed. Accepted grading practices will then be used to determine a percentage grade for the module—a mark not less than 50% for successful completion. (**Note:** A module is

“successfully completed” when the student can demonstrate ALL of the exit-level competencies or MLEs defined for the module.)

6. *Which Resources May You Use?*

Resources considered appropriate for completing the module and learning activities are identified in this section of the guide. The resources may be available through the Learning Resources Distributing Centre (LRDC) and/or through other agencies. Some SLGs may reference a single resource, while others may reference a range of resources. Resources may include those identified in the Learning Resource Guide (Section I) as well as other sources of information considered appropriate.

7. *Activities/Worksheets*

This section provides student-centred and activity-based projects and assignments that support the module learner expectations. When appropriately aligned with curriculum and assessment standards, successful completion of the projects and assignments will also indicate successful completion of the module.

Strategies for Developing Student Learning Guides

Prior to commencing the development of a student learning guide, teachers are advised to obtain:

- the relevant Guide to Standards and Implementation
- the student learning guide template.

Information communicated to the student in the SLG must parallel and reflect the curriculum and assessment standards as defined for the module. Therefore, critical elements of the Guide to Standards and Implementation that need to be addressed throughout the SLG include:

- module and specific learner expectations
- assessment criteria and conditions
- assessment standards
- assessment tools.

Additional ideas and activities will need to be incorporated into the student learning guide. These can be obtained by:

- reflecting on projects and assignments you have used in delivering programs in the past
- identifying human and physical resources available within the school and community
- networking and exchanging ideas (including SLGs) with other teachers
- reviewing the range of resources (e.g., print, media, software) identified in the Learning Resource Guide (Section I) for a particular module/strand.

Copyright law must also be adhered to when preparing a SLG. Further information and guidelines regarding copyright law can be obtained by referring to the:

- *Copyright Act*
- *Copyright* and the *Can Copy Agreement*.

A final task in developing a student learning guide involves validating the level of difficulty/ challenge/rigour established, and making adjustments as considered appropriate.

A template for developing student learning guides, also available on the Internet, is provided in this section (see “Student Learning Guide Template,” pages J.5–10). Several sample student learning guides are also provided in this section (see “Sample Student Learning Guides,” starting on page J.11).

CAREER & TECHNOLOGY STUDIES



SAMPLE STUDENT LEARNING GUIDE TEMPLATE

WHY TAKE THIS MODULE?



WHAT DO YOU NEED TO KNOW BEFORE YOU START?



WHAT

**WILL YOU KNOW AND
BE ABLE TO DO
WHEN YOU FINISH?**

-
-
-
-
-
-
-
-

WHEN

SHOULD YOUR WORK BE DONE?



HOW WILL YOUR MARK FOR THIS MODULE BE DETERMINED?

	PERCENTAGE

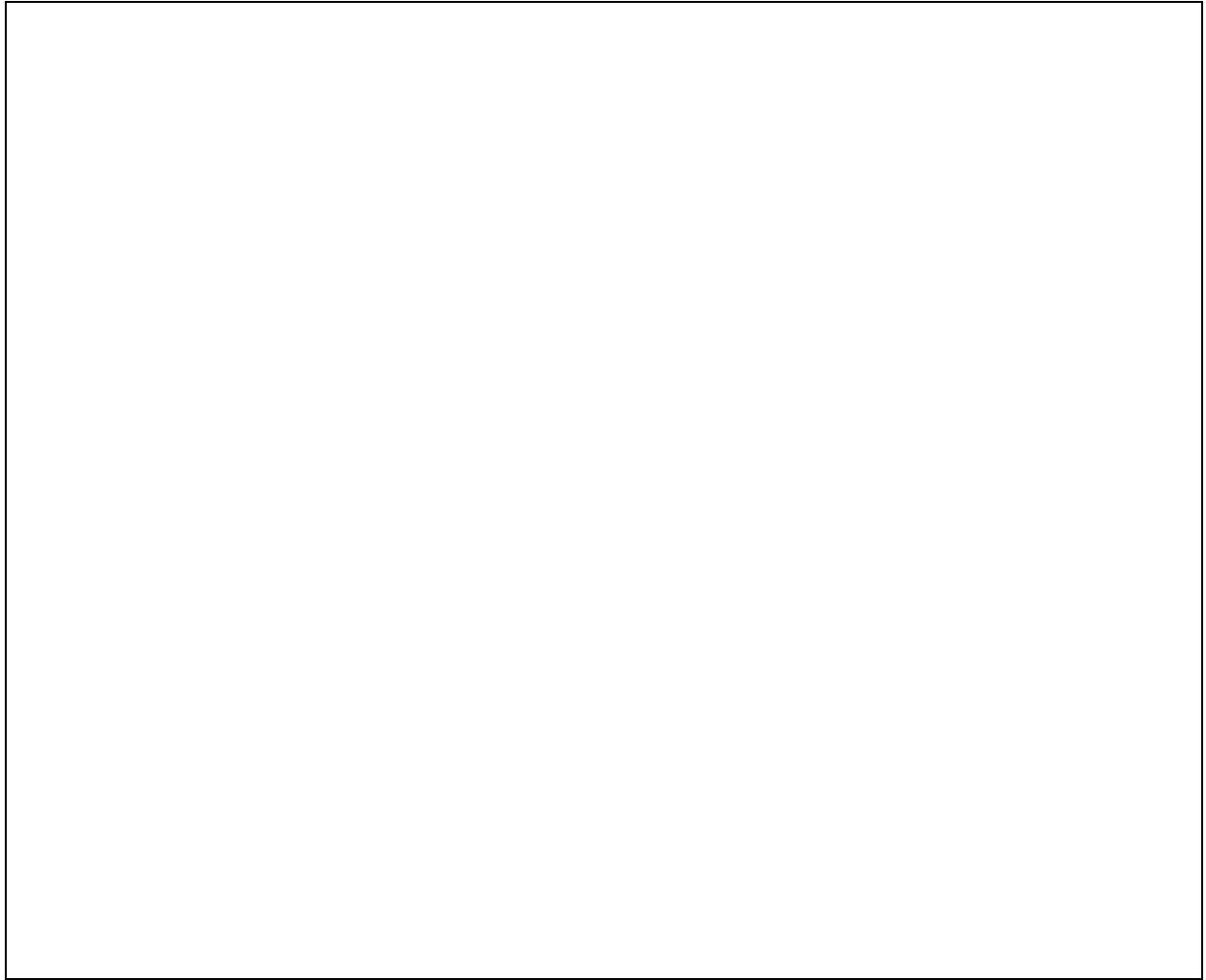


WHICH RESOURCES MAY YOU USE?



<ul style="list-style-type: none">•••••••

ACTIVITIES/WORKSHEETS



CAREER & TECHNOLOGY STUDIES

COMMUNICATION TECHNOLOGY

SAMPLE STUDENT LEARNING GUIDE

COM1030 Photography 1

COM1030 Photography 1

WHY TAKE THIS MODULE?



- Discover the magic of photography by using your camera to capture special moments and memories
- Gain confidence in the selection and use of cameras and film
- Experiment with composition and lighting
- Process your images into prints and share the results with others
- Explore the possibility of a communication career.

WHAT DO YOU NEED TO KNOW BEFORE YOU START?

There are no prerequisites identified for this module.

To be successful however, you should have an interest in photography and be willing to experiment and share your photographs with others.



COM1030 Photography 1

**WHAT WILL YOU KNOW AND
BE ABLE TO DO
WHEN YOU FINISH?**

Upon completion of this module you will be able to:

- use various photographic equipment, materials and processes to demonstrate basic photographic skills
- describe and/or use various processing methods; e.g., black and white, colour, digital
- describe the role of photography in society
- demonstrate basic competencies.

WHEN SHOULD YOU WORK BE DONE?

Your teacher will give you a timeline for completing tasks and assignments within this module.

You may also wish to use a time-management planning chart to preplan the work that needs to be done in this module. Plan how you will use your class time as well as extra time needed to complete the assignments in this module.

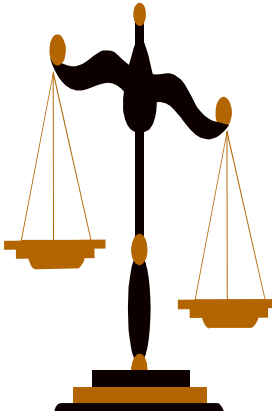


COMMUNICATION TECHNOLOGY

COM1030 Photography 1

HOW WILL YOUR MARK FOR THIS MODULE BE DETERMINED?

	PERCENTAGE
<p>You must first demonstrate all of the competencies required for this module.</p> <p>When you have done this, your percentage mark for the module will be determined as follows:</p> <ul style="list-style-type: none">• A portfolio consisting of five photographs:<ul style="list-style-type: none">– all of which are clearly focused and well composed– a “Photograph Log Sheet” with pertinent details• A test on basic photographic equipment, materials, processes and techniques• Appropriate presentation of your portfolio• Your efforts to develop and demonstrate management of your learning and the resources you use	<p>60%</p> <p>30%</p> <p>10%</p> <p>Integrated Throughout</p>



WHICH RESOURCES MAY YOU USE?



- Alesse, Craig. *Basic 35mm Photo Guide*.
- Walker and Walker. *Exploring Photography*.
- Sanders, Mark. *Communication Technology*.
- Johnson, Charles. *Communication Systems*.
- Lovell et al. *Handbook of Photography*

COM1030 Photography 1

ACTIVITIES/WORKSHEETS

Composition

Look through available magazines and select three or four photos which you feel are excellent. Why are the appealing? In deciding why consider the following:

- How rules of composition (e.g., rule of thirds, balance, “s” curve) have been used?
- How far away from the subject is the photographer?
- At what angle did the photographer take the picture?
- What is the background?
- Where was the light coming from when the picture was taken?
- What do you learn from the photograph?

Either in writing or through group discussion, describe your findings and identify things you would like to do when taking your own pictures.

Camera Types and Operation

- Identify a rangefinder, a single-reflex and/or a digital camera from several examples
- Identify the following parts of a camera: viewfinder, focusing ring, film advance, aperture and shutter controls, film rewind knob, film release button, ISO setting, frame counter, camera back opening latch, tripod mount
- Identify the ISO (International Standards Organization) guide number of the film being used and set it on the camera
- Take a light meter reading with your camera
- Mount the camera on a tripod and focus on a specific object
- Load some practice film into the camera to be used, advance several times and rewind and remove the film from the camera.

Taking and Processing Pictures

Load film into the camera, set the ISO guide number, set the shutter at about 1/125 of a second and make certain that the light meter works. Record all exposures on a photography log sheet. Identify correct exposures for specific lighting and camera techniques on the log sheet.

Use your knowledge of composition in composing each photograph.

Suggested pictures include:

- a moving car or bicycle
- a stop-action of another student jumping
- a close-up of a small object ½ metre away from the camera
- a head and shoulder portrait of another student
- a full-figure portrait of another student—try a triangular pose
- a composition with repeating lines, curves or shapes

COM1030 Photography 1

- a composition that shows sharp edges (e.g., corner of a desk, cardboard boxes)
- a composition that shows soft edges (e.g., folds of cloth, a kitten)
- a composition showing lighting contrasts such as bright areas and strong shadows.

When you have taken all your pictures, rewind the film. Place protective lens cap and case back on the camera and return all equipment to your teacher. Process and print images or arrange for images to be processed and printed.

Critique of your Work

Select five of your images, each of which illustrates a different photographic technique or purpose, and mount them in your notebook for presentation. Identify the following for each:

- type of film used
- aperture and shutter speed
- source and direction of light
- describe what you were trying to achieve (e.g., a head and shoulder portrait or a pattern produced by repeating shapes)
- explain what makes the photo well composed
- identify what you would do to improve your technique.

CAREER & TECHNOLOGY STUDIES

COMMUNICATION TECHNOLOGY

SAMPLE STUDENT LEARNING GUIDE

COM2060 Photographic Techniques 1

COM2060 Photographic Techniques 1

WHY TAKE THIS MODULE?



Although many people believe that a picture represents reality, this need not be the case. In this module, you will discover how, by changing the kind of lens that is used on the camera, the resulting image can be altered from what you actually see with your own eyes. In addition, you will have opportunities to manipulate the image after you have taken the picture.

WHAT DO YOU NEED TO KNOW BEFORE YOU START?

Prerequisite: COM1030 Photography 1



COM2060 Photographic Techniques 1

WHAT WILL YOU KNOW AND BE ABLE TO DO WHEN YOU FINISH?

Upon completion of this module you will be able to:

- describe the characteristics of different lenses and their applications
- apply depth-of-field principles to obtain a variety of results in completing photographic assignments
- describe and apply several darkroom and/or digital techniques, including cropping, contrast control, dodging, vignetting and burning in
- demonstrate basic competencies.

WHEN SHOULD YOU WORK BE DONE?

Your teacher will give you a timeline for completing tasks and assignments within this module.

You may also wish to use a time-management planning chart to preplan the work that needs to be done in this module. Plan how you will use your class time as well as extra time needed to complete the assignments in this module.

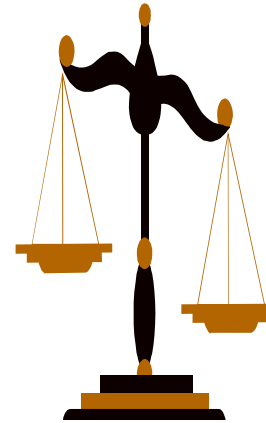


COMMUNICATION TECHNOLOGY

COM2060 Photographic Techniques 1

HOW WILL YOUR MARK FOR THIS MODULE BE DETERMINED?

	PERCENTAGE
<p>You must first demonstrate all of the competencies required for this module.</p> <p>When you have done this, your percentage mark for the module will be determined as follows:</p> <ul style="list-style-type: none">• Portfolio consisting of 5 photographs demonstrating the application of three camera and two printing techniques, a “Photography Log Sheet” and written descriptions of the techniques used• A test demonstrating knowledge of metering, exposure principles, light sources, lenses and depth-of-field• Photo presentation and documentation (e.g., each photo suitably mounted, reflection log)• Your efforts to demonstrate management for your learning, management of resources and responsibility and safety.	<p>70%</p> <p>20%</p> <p>10%</p> <p>Integrated Throughout</p>



WHICH RESOURCES MAY YOU USE?



You can complete this module in a number of ways. If you have an electronic imaging camera, a disc can be used to record images and then they can be printed with a computer and laser printer. If you have access to a darkroom, film can be processed into negatives, which in turn can be enlarged into prints.

You will refer to the following resources:

- Howell-Koehler, Nancy, *Creative Camera*
- Langford, Michael, *Step-by-Step Guide to Photography*
- Lovell et al., *Handbook of Photography*
- London, Barbara and Upton, John, *Photography, 5th Edition.*

COM2060 Photographic Techniques 1

ACTIVITIES/WORKSHEETS

Lenses and Related Ideas:

- To really appreciate lenses, you need to know a little about them – their construction, different types, effects achieved with them, cleaning procedures and handling techniques. Refer to the photography texts for more information.

Photographic Effects Created by Different Lenses:

- From the first activity above, you should now have some understanding of how lenses can be used to help capture unique and interesting images. Below are a number of effects that can be achieved by changing lens focal length. Locate pictures in magazines which illustrate several of these effects. Cut pictures out, mount them in your notebook, and suggest which lens you think was used to take the picture. Share your results with others.
 - Foreground and background in picture is out of focus
 - Only background of picture is out of focus
 - Everything is in focus
 - A picture with a very wide field of view
 - An extreme close-up of a small object
 - Head and shoulder portraits of people.

Taking and Processing Pictures

- Load your film into the camera, set the ISO, set the shutter at about 1/60 and make certain that the light meter works. Obtain an exposure log sheet to record all exposures. Ensure that lenses are clean.
 - use a normal lens and take a picture from ½ metre with a large and small aperture
 - take same pictures, only move back one or two metres
 - use a telephoto lens (100 mm or longer) and try some head and shoulder portraits
 - use a wide angle lens (35 mm or shorter) and try distorting an image
 - try a few creative free choice techniques.
- When you have taken all your pictures, rewind and remove the film from the camera. Place protective lens cap and case back on the camera and return all equipment to your teacher. Process the image, or arrange for them to be processed.

COM2060 Photographic Techniques 1

- When making prints, experiment with the following techniques:
 - make several prints of one image where you vary the contrast
 - vignette an image such as a portrait
 - combine more than one image on the same print
 - dodge (i.e., lighten) dark shadow areas of a print
 - burn in (i.e., darken) highlight areas of a print.

Critique Your Work

- Mount and present five prints demonstrating techniques showing at least three of the following:
 - same image showing a large and small depth-of-field
 - prints illustrating the effects achieved with short, normal and long lenses
 - a print showing multiple imaging
 - two or more prints illustrating burning and dodging techniques.
- With each mounted print, indicate the following:
 - type of film used
 - aperture, shutter, lens and camera to subject distance used
 - technique attempted
 - identify what you would do to improve your technique.
- Share your results with your teacher and other classmates.

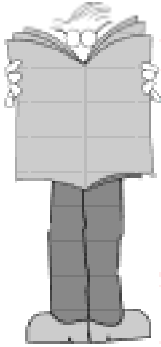
CAREER & TECHNOLOGY STUDIES

COMMUNICATION TECHNOLOGY

SAMPLE STUDENT LEARNING GUIDE

COM2090 Audio/Video 1

WHY TAKE THIS MODULE?



- Develop knowledge and technical skills in audio/video production.
- In this module you will complete at least one project and by doing so you will be better able to produce, analyze and critique personal and commercial audio/video productions.

WHAT DO YOU NEED TO KNOW BEFORE YOU START?

Although there are no prerequisites identified for this module, *COM1060 Audio/Video Production 1* will provide you with helpful background knowledge.

You should be able to demonstrate basic video production skills and techniques (e.g., planning, scripting, sound recording, camera and lighting) prior to commencing this module.



WHAT WILL YOU KNOW AND BE ABLE TO DO WHEN YOU FINISH?

Upon completion of this module you will be able to:

- complete assignments/projects, using audio/video equipment
- develop skill in using production elements; e.g., lighting, sound, effects
- critique audio/video assignments
- demonstrate basic competencies.

WHEN SHOULD YOUR WORK BE DONE?

Your teacher will give you a timeline for completing tasks and assignments within this module.

You may also wish to use a time-management planning chart to preplan the work that needs to be done in this module. Plan how you will use your class time as well as extra time needed to complete the assignments in this module.

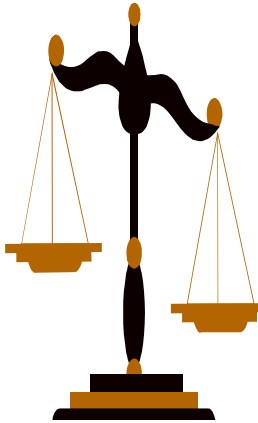


COMMUNICATION TECHNOLOGY

COM2090 Audio/Video 1

HOW WILL YOUR MARK FOR THIS MODULE BE DETERMINED?

	PERCENTAGE
<p>You must first demonstrate all of the competencies required for this module.</p> <p>When you have done this, your percentage mark for the module will be determined as follows:</p> <ul style="list-style-type: none">• A portfolio consisting of:<ul style="list-style-type: none">– two short (one minute) assignments– one project (3–5 minutes)– setting up, use, dismounting of equipment– preparation and use of storyboard– application of production elements• A test demonstrating knowledge of audio/video technology and equipment• A written critique of one of your presentations• Your efforts to demonstrate managing your learning; managing resources and teamwork and/or leadership skills.	<p>80%</p> <p>10%</p> <p>10%</p> <p>Integrated Throughout</p>



WHICH RESOURCES MAY YOU USE?



- Johnson, Charles D., *Communication Systems*
- Peter Hitchcock Productions, *Successful Home Videos*
- Hitchcock, Peter, *Videography: Guide to Making Videos*
- Zettl, Herbert, *Video Basics*

ACTIVITIES/WORKSHEETS

- Define and demonstrate the following video techniques:
 - Content Shots: one shot, two shot, three shot, group shot
 - Field-of-Views\Shots: extreme long shot, long shot, medium shot, close-up extreme close-up, establishing shot
 - Camera Movement Shots: pan, tilt, dolly, truck, zoom
 - Special Effect Shots: low angle, eye level/high angle, fade in/fade out, over-the-shoulder.
- Prepare a simple idea for an audio/video project and write a short description of how it would be developed through the following stages:
 - proposal/concept
 - treatment/plan
 - script
 - storyboard
 - production plan
 - the shoot
 - editing process
 - finished product.
- Produce two short assignments (one minute each) and one project (three to five minutes), and through these demonstrate knowledge of the following audio/video terminology and their application in production:
 - focal length
 - focus
 - aperture/F stop
 - depth-of-field
 - 3-point lighting
 - hard lighting/soft lighting
 - various lighting angles and directions
 - shot
 - scene
 - sequence
 - transition
 - cut
 - special effects
 - storyboard
 - continuity
 - credits
 - edit
 - dialogue
 - cutaways
 - glitch
 - visual/audio noise
 - microphone types
 - omni directional, unidirectional, boom, lavalier
 - ambient sound
 - training
 - head room
 - composition
 - aspect ratio

COM2090 Audio/Video 1

- producer
 - director
 - camera operator production assistant
 - lighting
 - sound recordist
 - audio director
 - talent
 - set designer
 - writer.
- Identify and use the basic operation components of audio/video equipment during project work; for example:
 - battery pack
 - cassette loading compartment
 - power source and switches
 - VCR/camera selector
 - audio/video output adapter
 - lens operations
 - microphone (internal and external)
 - focus control
 - lighting accessories tripod
 - TV monitor
 - special camera features: fade, time, date, tracking, counter, memory, record preview, editing controls.
 - AC adapter
 - record/pause switch
 - viewfinder and features
 - playback/stop/eject feature
 - audio/video cable
 - VHF, audio/video connection cables
 - zoom control
 - white balance
- Present one of your assignments to your group for critiquing and submit all assignments for evaluation.