Do-It-Yourself Quick Tips on On-line Lecture and More

Recently, many faculty members are seeking alternatives to deliver their lectures on-line. Since many of them are using the on-line medium for the first time, we have prepared some Quick Tips on the following topics:

- [How to prepare your lecture slides for on-line delivery](#)
- [How to keep your file size down and scan images effectively](#)
- [How to promote meaningful on-line discussions](#)
- [How to prepare the on-line print version for your lecture slides](#)
- [How to add narration to your lecture slides](#)

Don't forget you can also store your lecture materials on CD ROM copies or as printed copies and put the copies in the Library's Reserve Counter for students to access by reservation.
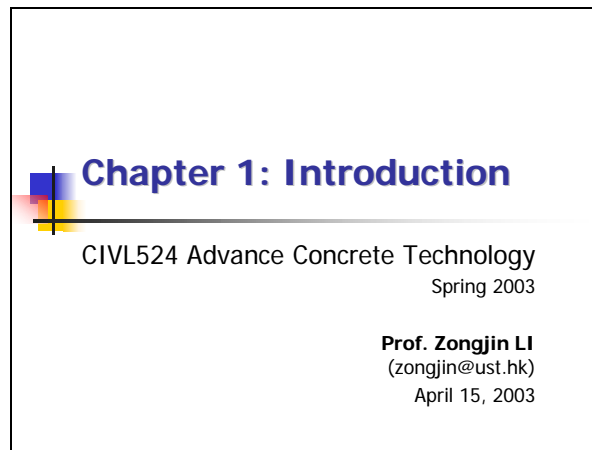
DIY Quick Tips:

How to Prepare Your Lecture Slides for On-line Delivery

Here is an **example** and some **tips** on how to prepare your **basic web-enabled** lecture slides quickly.

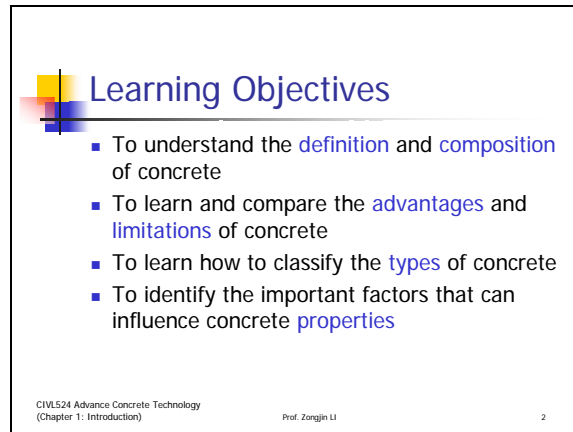| Example of Component in a Lecture	Example in PowerPoint *Example from CIVL524 Concrete Technology with author's permission*	Preparation Tips
Slide 1 **Cover slide**	**Chapter 1: Introduction** CIVL524 Advance Concrete Technology Spring 2003 **Prof. Zongjin LI** (zongjin@ust.hk) April 15, 2003	Information to be included in the **title slide**: - Topic - Course - Instructor - Contact - Delivery Date
Slide 2 **Agenda of expected learning outcomes of this lecture**	Learning Objectives ■ To understand the definition and composition of concrete ■ To learn and compare the advantages and limitations of concrete ■ To learn how to classify the types of concrete ■ To identify the important factors that can influence concrete properties CIVL524 Advance Concrete Technology (Chapter 1: Introduction)　　Prof. Zongjin LI　　2	Explain clearly the **learning objectives** to be achieved by your students. Highlight the key words if necessary.

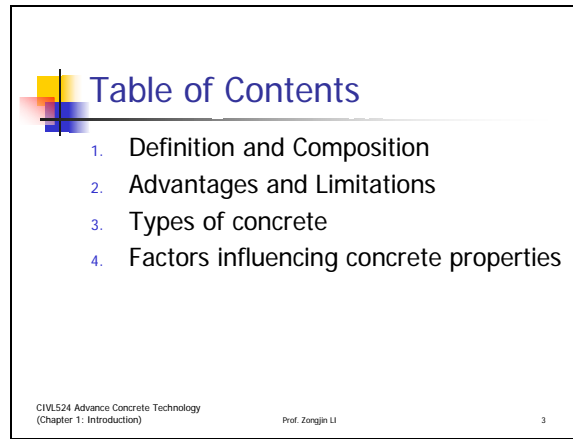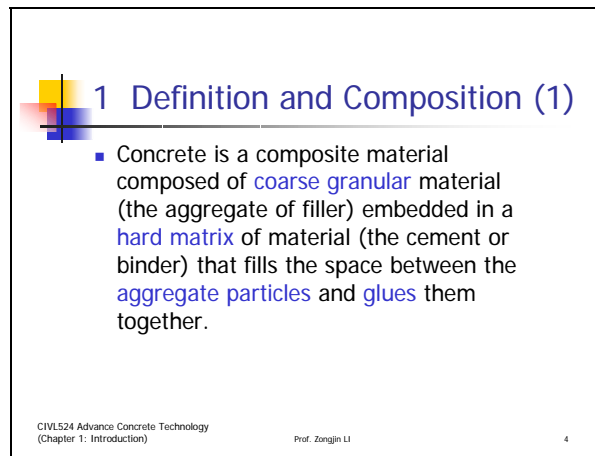Slide 3
**List of topics
to be covered
in this lecture**

Table of Contents

1. Definition and Composition
2. Advantages and Limitations
3. Types of concrete
4. Factors influencing concrete properties

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List the top-level topics to be covered before you go into details.
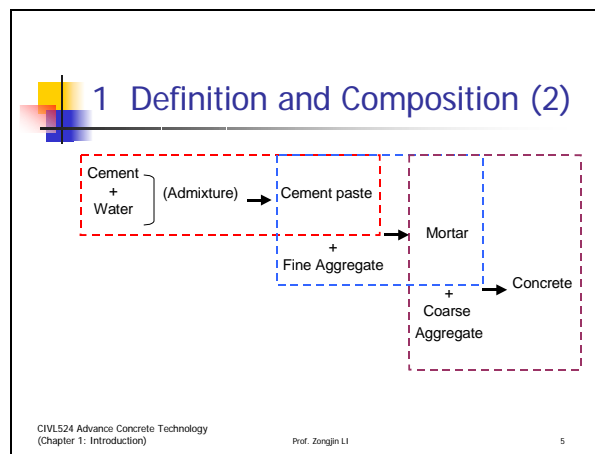
Slide 4
Slide title

1 Definition and Composition (1)

- Concrete is a composite material composed of coarse granular material (the aggregate of filler) embedded in a hard matrix of material (the cement or binder) that fills the space between the aggregate particles and glues them together.

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Slide titles should be unique and closely relate to the contents.
If the slide is lengthy, **spilt** the content into a couple of slides and **reference** them in the slide titles as shown here in slide 4 and 5.

Slide 5
**Simple line
drawings over
words**

1 Definition and Composition (2)

Cement + Water → (Admixture) → Cement paste
+ Fine Aggregate → Mortar
+ Coarse Aggregate → Concrete

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Use **simple line drawings** to indicate relationships of subjects instead of wordy paragraphs.

Slide 6
List of sub level topics

2.1 Advantages of Concrete

2.1.1 Economical
2.1.2 Ambient temperature hardened material
2.1.3 Ability to be cast
2.1.4 Energy efficient
2.1.5 Excellent resistance to water
2.1.6 High temperature resistance
2.1.7 Ability to consume waste
2.1.8 Ability to work with reinforcing steel
2.1.9 Less maintenance required

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If there are **sub-levels** in a particular topic, list them out first before you go into details.

Slide 7
Using symbols

2.1.1 Economical

Cement – HK$ 650/T
Aggregate – HK$ 40 ~ 60/T

Concrete – HK$ 250/T
V.S.
Steel – HK$ 2,000 ~ 4,000/T
Composite – HK$ 20,000/T

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Simplify your contents by grouping them into categories or using symbols to represent the relationships.

Slide 8
Adding copyright references

2.1.3 Ability to be cast

Bahai Tower in Chicago
Photo courtesy of © Wilmette Public Schools

Source:
http://www.wilmette.newtrier.k12.il.us/wilmette/cen
tral/museum98/museum/places/bhaiimp.html

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If you need to use third party resources, verify with your source on the usage and include the appropriate **copyright** statement.

Slide 9
Keeping contents brief

4.3.3 Aggregate shape and texture

Angular   Rough

- The aggregate shape and texture can influence workability, bond, and compressive strength of concrete
- At same W/C ratio and with same cement content, the aggregates with angular shape and rough surface texture result in lower workability but lead to better bond and mechanical properties

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Include less **then 10 lines** in a slide to help your students digest the content easily.

Slide 10
Adding visual examples

4.4 Admixtures

- It is important and necessary components of modern concrete technology.
  (In some countries, 70~80% of concrete contains one or more admixtures.)
- The concrete properties, both in fresh and hardened states, can be modified or improved by admixtures.

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Supplement with illustrations/ photos to help explain abstract contents or complicated procedures, yet, compress your images and convert to black/white mode to keep file size small.

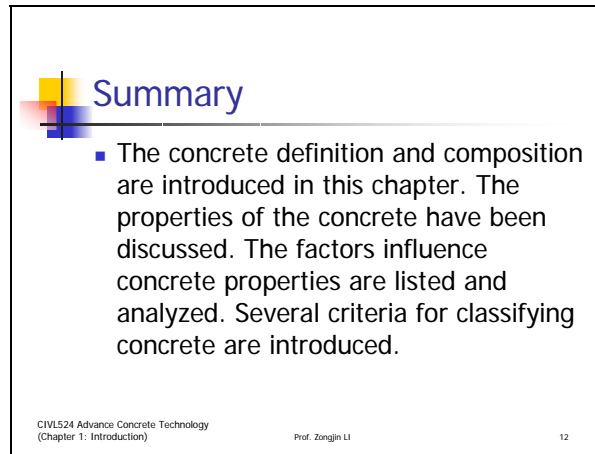Slide 11
Organizing complex contents

4.5 Mixing procedures

- Mixing procedures directly influence the workability of fresh concrete
- The following mixing procedure can obtain a very good workability with a high strength:
  1. Coarse aggregate + 75% water + 50% fine aggregate – mixing for 15 to 30 secs
  2. Add cement + superplasticizer + 50% find aggregate – mixing for 2 minutes
  3. Add 25% water – mixing for 3 minutes

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Chunk and **organize** your contents in different levels.
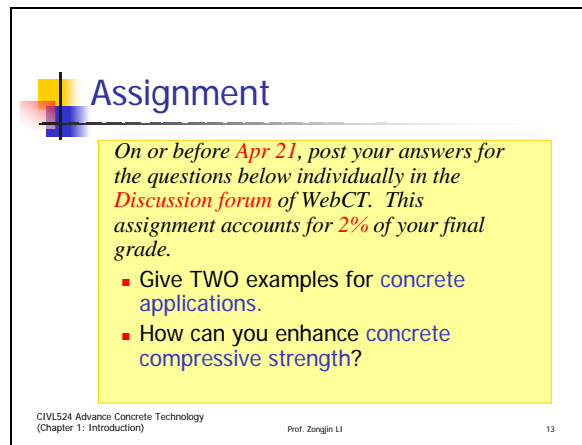
Slide 12
Reiteration

Summary

- The concrete definition and composition are introduced in this chapter. The properties of the concrete have been discussed. The factors influence concrete properties are listed and analyzed. Several criteria for classifying concrete are introduced.

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Summarize your lecture by emphasizing the major points there were covered.

Slide 13
Engage students' participation and assess their understanding

Assignment

On or before Apr 21, post your answers for the questions below individually in the Discussion forum of WebCT. This assignment accounts for 2% of your final grade.
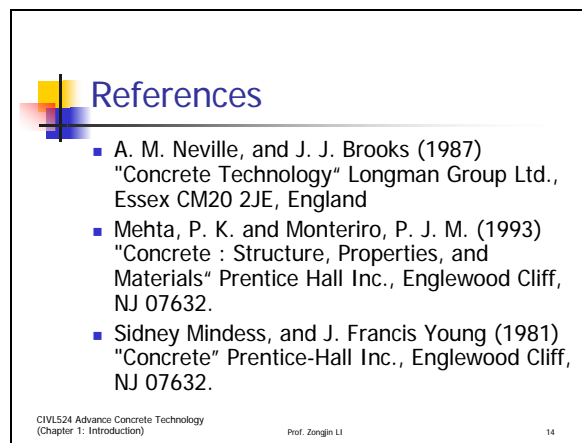
- Give TWO examples for concrete applications.
- How can you enhance concrete compressive strength?

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Posting **assignments as discussion tasks** encourage students to share their learning. Make sure you include:

- Assessment criteria
- Due date
- Submission method, etc.

Slide 14
Reference list

References

- A. M. Neville, and J. J. Brooks (1987) "Concrete Technology" Longman Group Ltd., Essex CM20 2JE, England
- Mehta, P. K. and Monteriro, P. J. M. (1993) "Concrete : Structure, Properties, and Materials" Prentice Hall Inc., Englewood Cliff, NJ 07632.
- Sidney Mindess, and J. Francis Young (1981) "Concrete" Prentice-Hall Inc., Englewood Cliff, NJ 07632.

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Attach a list of resources that could include URLs, books, articles, or other media for further study.

DIY Quick Tips:

How to Keep Your File Size Down and Scan Images Effectively

1. Avoid scanning hard copy transparencies and converting them to digital files. If you have to scan for urgent tasks, please refer to the **Scanning Recommendations** below.

2. Save your file data in black and white (B/W) for dissemination on the web if possible.

3. Insert compressed graphics or photographs in B/W, GIF or JPG file formats.

4. For screen display, the images require a much lower resolution (dpi) therefore, no need to insert high resolution images unless for printing purpose.

5. If your lecture is a long one, try to split the main file into a couple of files to ease direct access and down loading on the web.

Scanning Recommendations

Item	Color setting	Resolution	File format
Color graphic	'Million of color' (or 'Color photo')	150dpi for web/print output (adjust to 200-300dpi for better print quality)	JPG
Black and White (b/w) graphic	Grayscale (or 'b/w photo')	Same as above	JPG
Text	Same as b/w graphic (use Black and White for OCR)	Same as above	GIF

Notes:
- For **detailed graphics**, use a higher resolution (200-300dpi). View the scanned file using 100% zoom to ensure that the finest detail can be seen.
- For **decorative graphics**, use lower resolution (72dpi) in order to reduce the overall file size.

DIY Quick Tips:

How to Promote Meaningful On-line Discussions

According to our online course development experiences, meaningful discussion activities seldom happen by themselves in a forum, but rather by design; a design that will
- guide and stimulate students' interest to participate,
- enhance specific learning outcomes, and
- be practical to manage by lecturers.

The major focuses of this design are as follows:

1. **Lecturers taking the lead:**
    - Start a discussion activity by assigning a task that would require students to think and prepare for the response, such as: Analysis of a given situation or case, research on different perspectives of an issue, etc.
    - Start a discussion activity by posting a specific discussion topic to start a thread of communication.
    - Use regular email or non-public posting function in WebCT for private communication with individuals.

2. **Managing and rewarding two-way communication:**
    - Assign a small percentage of marks for participants who have contributed constructively.
    - Respond positively to participants who have contributed.
    - Let your presence be known and monitor discussions regularly, e.g. once every other day, or thrice weekly, etc., to clarify for students and to screen out contents that do not follow your etiquette.
    - Provide a time period for the above activities to develop so that you could effectively view all comments before making summary type of comments.

3. **Applying online discussion etiquette:**
    - Practice listening skills in online discussion by reading comments carefully before replying.
    - Be respectful and polite when commenting others' feedback.
    - Communication should be related to the course.
    - Keep comments brief and to the point.
    - Criticize on subjects not individuals.
    - Avoid using capital letters for the entire message that might come across as speaking loudly.
    - When responding, use your summary sentence as the title of your message.

DIY Quick Tips:

How to Make a PDF File

1. After you installed the Adobe Acrobat program, two more virtual printer names, **Acrobat Distiller and Acrobat Writer**, will appear in your Print dialog box under the File menu bar.
2. You can make PDF files with the same steps as you would in printing a hard copy. Choose Acrobat Distiller* as your printer for higher quality and Acrobat PDF Writer for speed.
3. After choosing a PDF virtual printer, the Print dialog box will prompt you for a **filename** and the storage **destination** of this PDF file.
4. After creating the PDF file, the **Adobe Acrobat** program will automatically launch and display your PDF file. Check your result.

*Customizing the conversion setting in Acrobat Distiller

1. After choosing **Acrobat Distiller** as your virtual printer, you can modify the end result of the PDF file.
2. Click the **Properties** button. Click the **Adobe PDF Setting** tab
   - Choose **Screen** setting keep your file size minimal when you do not need a high resolution quality.

   Choose **eBook** setting if for on-line viewing only.

DIY Quick Tips:

How to Record Narration/ Annotation in MS PowerPoint

1. Open a **PowerPoint** lecture file.
2. Go to **Slide Show** menu bar and click **Record Narration**.
3. Click **Set Microphone Level** to set the recording volume. Click the **Change Quality** button to select the recording quality. Click OK when finished in **Record Narration**.
4. Recording is automatic when you start your **Slide Show**. Speak into the microphone and click the next slide when done and repeat the steps until you finish all the slides. You cannot save while recording.
5. Save the file as PowerPoint. Save it as HTML document for web use however the file size will be much larger.
6. When users read your PowerPoint lecture file in the **Slide Show** mode, the narration / annotation will play automatically as each slide advances.
7. For **HTML** version, advise users to use the **IE browser**. In IE, click the **Slide Show** button in the lower right, the narration / annotation will play automatically as each slide advances.

Tips on recording
- Choose a quiet room
- Keep the distance between you and the microphone constant
- Keep your audio level constant
- Do not record sound while advancing each slide

Tips to organize your slides
- Use explicit headlines for the slides to provide clear random access of slides for users.
- Try saving your PowerPoint lecture into smaller files for easy downloading

Tips to keep your file size small
- Use lower quality media for smaller file size, e.g. lower resolution image (72 dpi for screen), lower quality sound (choose Telephone sound quality in Ppt) .*(For your information, 10 min of "Telephone Quality" narration in PowerPoint use up more than 6Mb of space.)*
- MS Producer, is a more advance software tool for creating a narrated presentation. It is a freeware, which requires PowerPoint 2002, and can be downloaded at http://www.microsoft.com/office/powerpoint/producer/