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

**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.

<table>
<thead>
<tr>
<th>Example of Component in a Lecture</th>
<th>Example in PowerPoint</th>
<th>Preparation Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slide 1</td>
<td>Example from CIVL524 Concrete Technology with author's permission</td>
<td>Information to be included in the title slide:</td>
</tr>
<tr>
<td>Cover slide</td>
<td></td>
<td>- Topic</td>
</tr>
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<td></td>
<td></td>
<td>- Course</td>
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<td></td>
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<td>- Instructor</td>
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<td></td>
<td></td>
<td>- Contact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Delivery Date</td>
</tr>
</tbody>
</table>

Information to be included in the title slide:
- Topic
- Course
- Instructor
- Contact
- Delivery Date

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**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**

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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

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.

Slide titles should be unique and closely relate to the contents. If the slide is lengthy, split 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)

Use simple line drawings to indicate relationships of subjects instead of wordy paragraphs.
DIY Quick Tips: How to prepare your lecture slides for on-line delivery

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

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

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/bhaitmp.html

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

Slide 9

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.

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

Adding visual examples

Slide 10

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.

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.

Organizing complex contents

Slide 11

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

Chunk and organize your contents in different levels.
DIY Quick Tips:
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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.

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?

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


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**

<table>
<thead>
<tr>
<th>Item</th>
<th>Color setting</th>
<th>Resolution</th>
<th>File format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color graphic</td>
<td>‘Million of color’ (or ‘Color photo’)</td>
<td>150dpi for web/print output (adjust to 200-300dpi for better print quality)</td>
<td>JPG</td>
</tr>
<tr>
<td>Black and White (b/w) graphic</td>
<td>Grayscale (or ‘b/w photo’)</td>
<td>Same as above</td>
<td>JPG</td>
</tr>
<tr>
<td>Text</td>
<td>Same as b/w graphic (use Black and White for OCR)</td>
<td>Same as above</td>
<td>GIF</td>
</tr>
</tbody>
</table>

**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/