



How to Develop High-quality Course Lecture Materials

Subtitle: Developing high-quality lecture materials for both online and in-person course delivery methods

1.0 Course Faculty Information

Name: Prof. Dr. M. Enamul Hossain
NSRIC Chair Professor in Sustainable Energy
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2.0 Course Information

Course(s) Codes	EDU-P-C00395
Class Days	Follow posting in NSRIC LMS system
Class Time	Follow posting in NSRIC LMS system
Course Credit Hours	1
Class Location	NSRIC online platform
Prerequisites and/or co-requisites	n/a
Level /A, E, H, I, K12, M, P, S, T, U, V, W	P (Professional courses)

Note: The below classification of courses is related to any areas of knowledge:

A: Advanced level academic level courses; **C:** Canadian immigration and training courses; **E:** Executive courses; **H:** Higher-level courses (i.e., graduate courses); **I:** Intermediate courses (i.e., university preparatory courses – Grade XII+); **K12:** Foundational, and lower-level courses; **M:** Mid-level courses (i.e., undergraduate courses); **P:** Professional courses; **S:** Short/seminar courses; **T:** Training courses; **U:** Tutorial Courses; **V:** Vocational training courses; and **W:** Workshop courses.

3.0 Professor Information

Name	Prof. Dr. M. Enamul Hossain
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Office Location	NSRIC online platform
Office Hours	10: 30 am – 11:30 am EST (Monday) by email appointment

Our Specializations:

1. **ADK:** to create different avenues and opportunities for the **Acquisition and Dissemination of Knowledge**.
2. **BDM:** to create **Business Development and Marketing** relationships for the growth of the institution.
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4.0 Target Audiences

- Any students interested in preparing a course for in-person or online course.
- Any educators, teachers, lecturers, professors, researchers, scientists, students, and interested readers in any discipline.
- University graduates, early career educators, scientists, professionals, and mentors.
- Any undergraduate and graduate student who is interested in preparing course lectures.

5.0 Course Description

In this course, audiences will learn the essential concepts and requirements for crafting the course lecture materials in any field of study. The course introduces the fundamental concepts and an in-depth analysis of how to prepare effective and best-quality online or in-person course lectures in the respective discipline. It offers an understanding of logical and structural techniques, skills, course delivery types and methodologies, including how to administer classroom management. In addition, the course covers the benefits, limitations of online teaching and common mistakes while preparing course materials. Concepts, theories, examples and suggestions or solutions are blended through clear lecture notes, live sessions, learning activities, understanding questions, and lecture note preparation. Two-course preparation templates are also included to relate and apply the conceptual topics added in the course to showcase students' understandings.

The course is specifically designed for educators, professors, lecturers, teachers, students, researchers, and professionals interested in understanding and developing in-person or online course materials in their studies. This is an important course for audiences interested in preparing high-quality lecture materials for their courses to offer the same in synchronous, asynchronous, hybrid, or in-person modes of delivery and who want to be an established educator and build their career in academia.

The course is designed for individuals and educators who need to understand the basics of course preparation skills and subjects, too. The course contains ten lectures and two templates, each comprising 20 to 35 PowerPoint presentation slides and pdf documents. The course is also designed with three quizzes, one feedback form and one project. This project offers a hands-on experience by creating a course that students can publish on an online education platform like NSRIC. A certificate of completion will be awarded to the participant.

Keywords: writing structure, online course, in-person course, synchronous course, asynchronous course, hybrid course, peer review, writing skills, common mistakes, benefits of online course, e-learning, distance learning, and classroom management.

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6.0 Course Learning Outcomes

Students who complete this course can achieve the following course learning outcomes (CLOs):

Module I

- CLO1: Understanding the requirements for preparing an online or in-person course lecture materials, benefits, and limitations.
- CLO2: Ability to identify the logic and structure of a better course design.
- CLO3: Understanding the process of mapping and structuring a high-quality course crafting.
- CLO4: Ability to identify the common mistakes that make a course lecture better and more effective.
- CLO5: Being able to know how to develop successful high-end course lecture materials.
- CLO6: Familiarize yourself with the selection criteria and steps for preparing course materials.
- CLO7: The ability to understand, comprehend, follow, and implement classroom management.
- CLO8: Familiarize the student's feedback form and collect the student's responses for the offered course.

7.0 How the course supports the attainment of student outcomes

Student Learning Outcomes (1-6)						
1	2	3	4	5	6	7
Moderate	Moderate	Moderate	Low	Moderate	Moderate	Excellent

8.0 Course Materials

Online course materials

- Online presentation documents in PDF form.
- Audio/visual recording of lectures (Optional).
- Online tutorials and meetings with students upon request.
- Quizzes in the forms of True/False and MCQs for evaluation at the NSRIC online MLS system
- A project for the course completion
- Reading materials, if any, in pdf form

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9.0 Academic Integrity

Students are encouraged to have a look at the NSRIC's statement of academic integrity on the NSRIC website. It is noted that by signing this syllabus, you will acknowledge that you have understood that any detected plagiarism should be reported.

10. Assessment for Grade

This course is a professional course not an academic course (i.e., K12, and university level courses). Therefore, there will not be any assessment based on individual and team performance as shown in Table 1. However, the course contains four quizzes and assignments to make the assessment. Students will receive a "**Certificate of completion**" after successful completion of the course.

Table 1: NSRIC grading system.

Type of Assessment	Grade %
Participation/Engagement/Performance	10%
Assignments	0%
Quizzes	20%
Research Project	70%
Total	100%

Important Note:

- i) The below classified courses (i.e., academic courses) will only be evaluated based on the grade system shown in Table 2. A grade and certificate will be issued for the student(s) and participant(s).
A: Advanced level academic level courses; H: Higher-level courses (i.e., graduate courses); I: Intermediate courses (i.e., university preparatory courses – Grade XII+); K12: Foundational, and lower-level courses; M: Mid-level courses (i.e., undergraduate courses).
- ii) The below-classified courses will **not** be evaluated based on the grading system shown in Table 2. A certificate will be issued for the student(s) and participant(s).

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Participation/Engagement/Performance

Your participation in every aspect of the course is important for the learning process. Your engagement in every discussion in the course, and due delivery of all practices will be fruitful. These efforts from your side will reflect your performance in the course delivery and your commitments. This performance is the reflection of your dream grade!!

At the end of the term, below Table 2 will be used for translating your marks into a “Letter Grade” based on the NSRIC grading policy.

11.0 Advice and additional requirements

I advise you to:

- Please contact me if you need any help.
- Students are expected to attend all scheduled online lecture classes.
- Students are expected to study from the course materials and/or textbooks which will help to easily read and understand.
- Students are encouraged to write their own notes during lectures/presentations (pdf PowerPoint presentations, and additional materials if any).
- Students are encouraged to attend online platform classes on time because late attendee disrupts the flow of the class for both the instructor and the other students.

Table 2: NSRIC letter grading system.

Marks	Letter Grade	Points	Description
≥ 93	A+	4.00	Outstanding
≥ 90	A	3.75	
≥ 87	A-	3.50	Excellent
≥ 84	B+	3.25	Very good
≥ 81	B	3.0	
≥ 78	B-	2.75	Moderately Good
≥ 75	C+	2.50	Good
≥ 72	C	2.25	
≥ 69	C-	2.0	Moderately Good
≥ 66	D+	1.75	Pass
≥ 63	D	1.50	
≥ 60	D-	1.25	Poor Pass
< 60	F	0	Failing

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Additional information (During the Online Course offering Period)

- The PowerPoint course materials and video lectures will be available on the NSRIC Platform.
- There will be scheduled discussion/tutorial sessions based on the request at the class scheduled time. All students must attend this session (Need the student's email request).
- There will be an office hour for students on Monday from 10:30 am to 11:30 am EST (Toronto, Canada time). Students need to send an email request so that a Zoom meeting can be arranged. In addition, any time students can set up an online appointment (i.e., phone, zoom, or other mode of communication) based on the availability of the course instructor. However, students should request an email to set up this type of meeting.

12.0 Course Topics

- An introduction to the course with different definitions and comparison.
- Benefits of online courses.
- Types of different course delivery methodologies.
- Important skills and steps for crafting a high-quality course design.
- Anatomy of preparing course lecture materials.
- Common mistakes and their solutions while preparing a course.
- Where to publish your course.

Requirements/Instructions

Students are advised to register for all drilling engineering modules courses to become a master in the subject area.

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13.0 Course Contents and Schedule

Lec. No.	Module	Topics	Remarks
Module I			
01	Introduction	Course details and introduction of a high-quality course	
02	Benefits	Benefits and limitations of online teaching and learning 1	
03	Benefits	Benefits and limitations of online teaching and learning 2	
04	Steps	Guidelines and steps for course preparation	Quiz 1
05	Anatomy	Anatomy of preparing course materials 1	
06	Anatomy	Anatomy of preparing course materials 2	
07	Anatomy	Anatomy of preparing course materials 3	Quiz 2
08	Mistakes	Common mistakes during preparation of course materials	
09	Administration	In-person and online course and classroom administration 1	
10	Administration	In-person and online course and classroom administration 1	Quiz 3
11	Templates	Two templates – Course outline and PPT slides as example cases	
12	Project	Guideline on course project	
13	Feedback	A course feedback form for collecting student's response	
Final Project – The submission deadline for the developed course is within two weeks of the course completion date.			

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