Instructional Design of Information Study 2

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1. Course Description

In this course, students aim to acquire the necessary knowledge and skills to teach "Information". First, students review what they learned in "Instructional Design of Information Study 1" such as goals and contents of information education in secondary schools, instructional design, learning assessment, and so on. Then, they will consider how to teach network, information system, database and data analysis. In the latter half of the course, students will write a teaching plan, conduct a trail lesson, and reflect the lesson. Through these activities of designing and conducting trail lessons, students will acquire knowledge and skills as a teacher.

2. Course Objectives

This course aims to improve students' understanding of information education in secondary schools as the follow-up to the subject "Instructional Design of Information Study". Students are expected to be able to conduct lessons of course "Information".
The specific goals for students are the following:
-To be able to explain educational goals and philosophy of information education in elementary and secondary education.
-To be able to explain learning contents in common subjects "Information".
-To be able to write a plan to teach a part of "Information Study by Scientific Approach" based on the idea of instructional design.
-To be able to prepare teaching materials and conduct a lesson based on the teaching plan.

3. Grading Policy

The criteria for passing are to be accepted all required reports and to score 60% points on the final examination. Feedbacks on reports are given via LMS. The final grade of students who passed will be calculated according to the following process: reports in each class 60% and the final examination 40%.

4. Textbook and Reference

Textbook
MEXT   Teaching guides for the courses of study "Information"
  MEXT(2018)
 (https://www.mext.go.jp/content/1407073_11_1_2.pdf)
Information Study by Scientific Approach   Tokyo Shoseki Co., Ltd.
MEXT   Learning material for teachers on information subject at high school "Information I"   MEXT (2019)
(https://www.mext.go.jp/a_menu/shotou/zyouhou/detail/1416756.htm)

5. Requirements(Assignments)

In-class and out-of-class learning cannot be distinguished because this subject is a correspondence course. Learning materials are provided via LMS. Students are expected to learn according to the directions on LMS. Learning activities on each class will take about 4 hours and a half.

6. Note

The course is conducted in Japanese.

7. Schedule

[1]   Introduction, semantic composition and visual styles of documents
[2]   Instruction on "Information and telecommunications network"
[3]   Instruction on "Information system and database"
[4]   Instruction on "Quantitative data analysis"
[5]   Instruction on "Qualitative data analysis"
[6]   Investigation of practical research on education (database and data science).
[7]   Study of learning materials for trial lesson (digitization).
[8]   Instructional design and teaching plan for trial lesson (digitization).
[9]   Completion of learning materials and simulation of lesson (digitization).
[10]   Watching and evaluating trial lesson video.
[11]   Study of learning materials for trial lesson (programming or database).
[12]   Instructional design and teaching plan for trial lesson (programming or database).
[13]   Completion of learning materials and simulation of lesson (programming or database).
[14]   Conducting and recording trial lesson.
[15]   Review and final report.