

澳門大學
University of Macau
教育學院
Faculty of Education

課程簡介
Course Description & Scheme of Work

科目名稱：

Course Title: *Integrating IT into Secondary Teaching and Learning*

學分:

Units: 3

科目編號: *MAEB223*

學生人數: 35

No. of Students: _____

Course Code: _____

講師姓名: *CHAN KAN KAN*

Lecturer's Name: _____

課程: 教育學士 學位後教育證書 教育碩士學位
Programme: B.Ed. P.G.C.E. M.Ed.

學部: 中學 小學教育 學前教育
Level: Secondary Ed. Primary Ed. Pre-primary Ed.

組別: 職前 在職
Section: Pre-service In-service

學期: 13/14 年度 第一學期 第二學期
Semester: Academic Year 1st Semester 2nd Semester

I. 課程概述 General Description

The aim of this course is to equip the students with the latest theoretical knowledge in technology integration, practical skills on computer tools, and a critical understanding of the application and value of IT in teaching and learning so as to allow students to implement, integrate and manage IT in their actual classroom environment.

Objectives

the course, students are expected to:

1. understand the conditions for integration of technology;

2. apply principles of technology integration in teaching and learning;

3. demonstrate an understanding and knowledge of using technology in teaching and mathematics;

4. design instruction using technology and evaluate the potential advantages and disadvantages of using technology in actual classroom;

5. demonstrate confidence in using technology in teaching and learning;

6. demonstrate prior knowledge of technology pedagogical content knowledge;

Course Outline

1. *for effective technology integration: TIP & Essentials condition for technology integration*

2. *Technology in Language Art instructions*

3. *Technology in Mathematics and Science Instruction*

4. *Technology in Social Studies Instruction*

5. *Use of dynamic geometry software*

6. *Technology-based instruction*

Theme of Work

Topic	Read Book
1/14 Introduction	C2
2/21 Essentials conditions for integration of technology	C2
3/28 A technology integration planning model for teachers (TIP)	
<i>Teaching and Learning with technology in Language Art</i>	C9
4/3/7 instruction	
5/14 <i>Teaching and Learning with technology in Science instruction</i>	C11
<i>Teaching and Learning with technology in Social Studies</i>	C12

13	2014/5/9	<i>Design of technology-based instruction</i>
14	2014/5/16	<i>Project Presentation</i>
15	2014/5/23	<i>Conclusion</i>

V. 作業 Assignment

性質 Type	題目 Topic	評核比重(%) Weight (%)	估計所需時間 No. of hour needed	最後繳交日期 Deadline
<i>Individual</i>	<i>Participation in class and online</i>	<i>10%</i>		
<i>Homework</i>		<i>20%</i>	<i>3 hours</i>	<i>Weekly</i>
<i>Group Project</i>	<i>Design and evaluate a technology-based instruction for secondary mathematics.</i>	<i>35%</i>	<i>3 week</i>	<i>13/5/2014</i>
<i>Examination</i>		<i>35%</i>	<i>3 hours</i>	<i>Arranged by UM</i>

Participation in class and online – Students are expected to engage in class actively.

Assignments - There are 8 topics in this course. Each topic has one or two discussion questions for students to review the topic covered. Students are required to participate in class or online in at least 4 of the topics in order to have scores. Weekly deadline for assignment is at 11:55pm, Monday.

Group Project – The purpose of this project is to engage students in exploring the application of dynamic geometry software in Macau context. Students have to select a topic and design a technology-based instruction for secondary mathematics education. A critical review of the plan is also needed.

Project Requirement:

- *Each group has 3 or 4 members.*
- *Each group has to prepare an instructional plan and put it online for comments.*
- *Report should include*
 1. *the rationale of using technology and the theory involved.*
 2. *Instructional plan*
 3. *Worksheet or courseware required*
 4. *Identify TPACK,*
 5. *Evaluation of the plan in real classroom settings*
- *Deadline is 13-5-2014.*

Final Examination: 30% - It will assess students' understanding of knowledge covered in the course.

VI. 參考資料

- Roblyer M.D., & Aaron H. Doering. (2013). *Integrating Educational Technology into Teaching*. Boston: Allyn & Bacon.

備註 Remarks

Disability statement

Chinese Version:

學生身心障礙支援服務

澳門大學致力為身心障礙人士提供平等的學習機會，若您在肢體、視力、聽力、語言、學習或心理上的障礙，導致您在學習或日常活動中受到嚴重的限制，我們鼓勵您與老師溝通，讓他/她知道你的狀況，並作出適當的安排。此外，我們也鼓勵您與學生輔導及發展處之學生身心障礙支援服務聯繫，該服務將為有需要的學生提供相應的資源和設施，讓所有學生都能在大學裏享有同等的教育機會、大學生活及服務。如閣下對此服務有任何疑問，歡迎聯絡學生輔導及發展處（電郵：scd.disability@umac.mo；電話：83974901/83974820；瀏覽網頁<http://www.umac.mo/sao/disability>）。

English Version:

STUDENT DISABILITIES SUPPORT SERVICE

The University of Macau is committed to providing an equal opportunity in education to persons with disabilities. If you are a student with a physical, visual, hearing, speech, learning or psychological impairment(s) which substantially limit your learning and/or activities of daily living, you are encouraged to communicate with your instructors about your impairment(s) and the accommodations you need in your studies. You are also encouraged to contact the Student Disability Support Service of the Student Counselling and Development Section (SCD), which provides appropriate resources and accommodations to allow each student with a disability to have an equal opportunity in education, university life activities and services at the University of Macau. To learn more about the service, please contact SCD at scd.disability@umac.mo, or 8397 4901 or visit the following website: <http://www.umac.mo/sao/disability>.

講師簽署

Signature of Lecturer : _____



日期 10-Feb-2014

Date: _____

院長/ 課程主任簽署

Signature of Dean/ Programme Coordinator : _____

日期

Date: _____