UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Technology in Education (blended)

2122-1-F5701R003

Course title

Technology of education

Topics and course structure

Topics and course structure

- The informational Society
- On line didactics
- On line Learning environment
- Multimedia Learning object
- E-learning
- Case study
- Community of practice and learning community
- E-learning trends

Objectives

This course, through a constant and attended attendance to the lessons and to the Laboratory connected to the course, intends to promote the following learning, in terms of knowledge and understanding of the following topics:

- To provide essential knowledge of theories about e-learning and on line didactic in adult education;

- To provide essential knowledge of learning models and on line and blended teaching methods;

- to develop skills and competency in lifelong learning and training needs analysis;

- to develop skills in managing training sessions in the classroom and on line in group or individual session,

- to provide essential knowledge of the teaching methods;

- to develop skills in design and evaluation of training applications.

All this with the aim of forming a professional figure that is able

to fit into the management of human resources and training

of companies and institutions, with good expertise in the bases of "digitally augmented" training.

This form of training is increasingly widespread in medium and large Italian companies, as well as

in some sectors of the public administration: health, regions in particular.

Methodologies

Blended learning: this course is delivered according to the "Flipped Classroom" method. It will provide a continuum of classroom activities and on-line activities and will be divided into two modules consisting of one lesson per week, materials, video lessons and online presentations, and two project to be conducted with the support of a tutor on-line

Frontal lecture

workgroup

Web conference

On line discussion

e-tivites

All these activities are carried out in presence through lectures

and testimonies and are linked with moments of online group work, case studies,

and online discussions.

These activities aim to provide students with theoretical knowledge

as well as practical and operational skills for understanding the objectives

of the course.

Online and offline teaching materials

slides, learning objects and other digital resources available from e-learning course

Programme and references for attending students

Questa Bibliografia è orientativa, così come la modalità di erogazione del Corso che si svolgerà nel secondo semestre. *A fine Settembre* verrà comunicata la bibliografia definitiva e la modalità di erogazione del corso dipendentemente dall'andamento dell'emergenza in corso

1. Rivoltella P.C., Rossi, P. G., Tecnologie per la didattica, Ediz. Mylab, Pearson, 2019

Sancassani, S. , Progettare l'innovazione didattica, Pearson 2019

3. Ferri, P., Moriggi, S., A scuola con le tecnologie. Manuale di didattica digitalmente aumentata, Mondadori, parte 1, pp 1-68

4. Un articolo a scelta tra quelli scaricabili dalla Biblioteca d'Ateneo

- Huang, H.-M., & Liaw, S.-S. (2018). An Analysis of Learners' Intentions Toward Virtual Reality Learning Based on Constructivist and Technology Acceptance Approaches. The International Review of Research in Open and Distributed Learning, 19(1). https://doi.org/10.19173/irrodl.v19i1.2503
- Huang, H.-M., & Liaw, S.-S. (2018). An Analysis of Learners' Intentions Toward Virtual Reality Learning Based on Constructivist and Technology Acceptance Approaches. The International Review of Research in Open and Distributed Learning, 19(1). https://doi.org/10.19173/irrodl.v19i1.2503

- Ognjanovic, I., Gasevic, D., & Dawson, S. (2016). Using institutional data to predict student course

selections in higher education. The Internet and Higher Education, 29, 49–62. https://doi.org/10.1016/j.iheduc.2015.12.002

- Wei, X., Weng, D., Liu, Y., & Wang, Y. (2015). Teaching based on augmented reality for a technical creative design course. Computers & Education, 81, 221–234. http://doi.org/10.1016/j.compedu.2014.10.017

- Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: Motivations and self-regulated learning in MOOCs. Internet and Higher Education, 29, 40–48. http://doi.org/10.1016/j.iheduc.2015.12.003

- Alraimi, K. M., Zo, H., & Ciganek, A. P. (2014). Understanding the MOOCs continuance: The role of openness and reputation. Computers & Education, 80, 28–38. http://doi.org/10.1016/j.compedu.2014.08.006
- Yücel, Ü. A., & Usluel, Y. K. (2016). Knowledge building and the quantity, content and quality of the interaction and participation of students in an online collaborative learning environment. Computers & Education, 97, 31–48. http://doi.org/10.1016/j.compedu.2016.02.015
- Ossiannilsson, E. and Landgren, L. (2012), Quality in e-learning – a conceptual framework based on experiences from three international benchmarking projects. Journal of Computer Assisted Learning, 28: 42–51. doi: 10.1111/j.1365-2729.2011.00439.
- Hamza-Lup, F. G. and Sopin, I. (2009). Web-Based 3D and haptic interactive environments for e-Learning, simulation, and training web information systems and technologies. volume 18 of Lecture Notes in Business Information Processing, chapter 26, pages 349–360. Springer Berlin Heidelberg, Berlin, Heidelberg.
- Cheng, Y.-M. (2011), Antecedents and consequences of e-learning acceptance. Information Systems Journal, 21: 269–299. doi: 10.1111/j.1365-2575.2010.00356.x
- Du, H., Hao, J.-X., Kwok, R. and Wagner, C. (2010), Can a lean medium enhance large-group communication? Examining the impact of interactive mobile learning. J. Am. Soc. Inf. Sci., 61: 2122–2137. doi: 10.1002/asi.21

Programme and references for non-attending students

Questa Bibliografia è orientativa, così come la modalità di erogazione del Corso che si svolgerà nel secondo semestre. *A fine Settembre* verrà comunicata la bibliografia definitiva e la modalità di erogazione del corso dipendentemente dall'andamento dell'emergenza in corso

1. Rivoltella P.C., Rossi, P. G., Tecnologie per la didattica, Ediz. Mylab, Pearson, 2019

2. Sancassani, S. , Progettare l'innovazione didattica, Person 2019

3. Ferri, P., Moriggi, S., A scuola con le tecnologie. Manuale di didattica digitalmente aumentata, Mondadori, parte 1, pp 1-68

4. due articoli a scelta tra quelli scaricabili dalla Biblioteca d'Ateneo

- Huang, H.-M., & Liaw, S.-S. (2018). An Analysis of Learners' Intentions Toward Virtual Reality Learning Based on Constructivist and Technology Acceptance Approaches. The International Review of Research in Open and Distributed Learning, 19(1). https://doi.org/10.19173/irrodl.v19i1.2503
- Huang, H.-M., & Liaw, S.-S. (2018). An Analysis of Learners' Intentions Toward Virtual Reality Learning Based on Constructivist and Technology Acceptance Approaches. The International Review of Research in Open and Distributed Learning, 19(1). https://doi.org/10.19173/irrodl.v19i1.2503

- Ognjanovic, I., Gasevic, D., & Dawson, S. (2016). Using institutional data to predict student course selections in higher education. The Internet and Higher Education, 29, 49–62. https://doi.org/10.1016/j.iheduc.2015.12.002

- Wei, X., Weng, D., Liu, Y., & Wang, Y. (2015). Teaching based on augmented reality for a technical creative design course. Computers & Education, 81, 221–234. http://doi.org/10.1016/j.compedu.2014.10.017

- Littlejohn, A., Hood, N., Milligan, C., & Mustain, P. (2016). Learning in MOOCs: Motivations and self-regulated learning in MOOCs. Internet and Higher Education, 29, 40–48. http://doi.org/10.1016/j.iheduc.2015.12.003

- Alraimi, K. M., Zo, H., & Ciganek, A. P. (2014). Understanding the MOOCs continuance: The role of openness and reputation. Computers & Education, 80, 28–38. http://doi.org/10.1016/j.compedu.2014.08.006
- Yücel, Ü. A., & Usluel, Y. K. (2016). Knowledge building and the quantity, content and quality of the interaction and participation of students in an online collaborative learning environment. Computers & Education, 97, 31–48. http://doi.org/10.1016/j.compedu.2016.02.015
- Ossiannilsson, E. and Landgren, L. (2012), Quality in e-learning – a conceptual framework based on experiences from three international benchmarking projects. Journal of Computer Assisted Learning, 28: 42–51. doi: 10.1111/j.1365-2729.2011.00439.x
- Hamza-Lup, F. G. and Sopin, I. (2009). Web-Based 3D and haptic interactive environments for e-Learning, simulation, and training web information systems and technologies. volume 18 of Lecture Notes in Business Information Processing, chapter 26, pages 349–360. Springer Berlin Heidelberg, Berlin, Heidelberg.
- Cheng, Y.-M. (2011), Antecedents and consequences of e-learning acceptance. Information Systems Journal, 21: 269–299. doi: 10.1111/j.1365-2575.2010.00356.x
- Du, H., Hao, J.-X., Kwok, R. and Wagner, C. (2010), Can a lean medium enhance large-group communication? Examining the impact of interactive mobile learning. J. Am. Soc. Inf. Sci., 61: 2122–2137. doi: 10.1002/asi.21

Assessment methods

The exam is oral and the questions are about:

topics covered in class;
discussion of the exercises carried out during the course (for attending students);
volumes brought to the examination.

Office hours

On appointment

Programme validity

Two Accademic years

Course tutors and assistants

Stefano Moriggi

Francesca Scenini