

MATH2A - Teaching profile

Learning outcomes

1. Vision of the diploma

Teaching mathematics to students in secondary education, such is the challenge that the aggregation student (didactics course) prepares to face. The vision of aggregation in mathematics (didactics course) is to provide him or her with an initial training that will enable the student to mobilize the necessary skills to start out effectively in the profession of teacher and to develop positively.

Today's teachers are called on to play an essential role for their students, so say the "mission decrees" of 24 July 1997:

- to promote self-confidence and the development of the person of each student;
- to show the students how to assimilate knowledge and acquire the skills to make them able to learn throughout their lives and take an active place in economic, social and cultural life;
- to prepare all students to become responsible citizens, capable of contributing to the development of a democratic, solidarist, pluralist society open to other cultures;
- to guarantee all students equal opportunities for social emancipation.

The initial teacher training is based on the command of existing skills and abilities (developed in part in the core of the programme) that the student must mobilize and developing through different aggregation activities (didactics course):

- the knowledge and discipline(s) to be taught;
- clear, correct communication in the language of teaching, both oral and written;
- a critical, autonomous relation with the reference knowledge (scientific and cultural);
- relational capacities associated with the profile of the profession;
- a rich general knowledge and an openness to the diversity of cultures allowing future students to be made receptive to the world;
- the concern of participating in the role of democratization of the school.

2. The referential of skills and abilities acquired through training defining the output profile of diplomas on completion of aggregation in mathematics (didactics course)

At the end of the programme of aggregation in mathematics (didactics course) the graduate will have acquired and demonstrated command of the knowledge and skills mentioned below. These latter are defined in reference in the Decree of 8 February 2001 on the initial training for upper secondary education aggregation.

On successful completion of this programme, each student is able to :

1. Intervening in a school context, in partnership with different actors.

- 1.1. Situating and appropriating the role assigned to the teacher within the school institution, with reference to the legal texts.
- 1.2. Mobilizing knowledge in human sciences for a correct interpretation of situations experienced in and around the classroom and for a better adaptation to school publics.
- 1.3. Mastering and mobilizing the communicational and relational skills essential for exercising the profession of teacher.
- 1.4. Dialoguing and collaborating constructively with the education partners involved in the training activities (in seminars and training courses: headmasters, supervisors, course leaders and other persons in the training course).

2. Teaching in authentic, varied situations.

- 2.1. Integrating teaching attitudes and behaviours on the service of the individual and collective training and the management of the class group.
- 2.2. Acquiring and using the didactics and disciplinary epistemology that guide pedagogic action.
- 2.3. Transposing reference learned knowledge and cultural practices into taught knowledge.
- 2.4. Conceiving and planning teaching-training situations, including assessment, according to the students concerned and in connection with the skills referentials and programmes.
- 2.5. Steering and adjusting the implementation of teaching-training situations.
- 2.6. Being capable of commanding new disciplinary and interdisciplinary knowledge to be taught.
- 2.7. Exploring new approaches and disciplinary, interdisciplinary and technological pedagogic tools.
- 2.8. In more specific (or complementary) way, for the teaching of mathematics, the graduate is capable of maîtriser différents outils et stratégies pour apprendre aux élèves à produire des commentaires personnels et autonomes.

3. Exercising critical faculties and pursuing a logic of continuous development.

- 3.1. Measuring the main ethical issues in connection with day-to-day practice.
- 3.2. Challenging one's initial representations and conceptions with a view to developing them.
- 3.3. Adopting a reflective attitude on one's teaching practices with reference to didactic and pedagogic principles and research in education.
- 3.4. Integrating a logic of continuous apprenticeship and development essential for developing positively in the school environment, linked to societal reality.

Programme structure

Ces compétences sont développées via trois types d'activités :

- des stages dans l'enseignement secondaire supérieur (60h);
- des séminaires en petits groupes;
- des cours magistraux et des conférences.

Une partie de ces activités est commune à toutes les disciplines (elles portent le sigle AGRE), l'autre partie est propre à la discipline (ces activités portent un sigle disciplinaire). Les activités totalisent 300 heures (30 crédits).

La formation diplômante « Agrégation de l'enseignement secondaire supérieur » est organisée en référence au décret du 8 février 2001 relatif à la formation initiale des enseignants du secondaire supérieur en Communauté française de Belgique et au décret du

⌘ LSCI2320	Didactics and epistemology of science	Myriam De Kesel (coord.) Marc de Wergifosse Gabriel Dias de Carvalho Junior	FR [q1] [22.5h] [2 Credits] 🌐
------------	---------------------------------------	---	-------------------------------

⌘ **Complement to the didactics and epistemology of science course (2 credits)**

2 ECTS credits among

⌘ LBIO2340C	Didactics and Epistemology of Biology - 2d degree	Myriam De Kesel	FR [q1] [18.5h] [2 Credits] 🌐
⌘ LBIO2340D	Didactics and Epistemology of Biology - 3d degree	Myriam De Kesel	FR [q2] [19h] [2 Credits] 🌐
⌘ LCHM2340C	Didactics and epistemology of chemistry - 2d degree	Marc de Wergifosse (coord.) Nathalie Matthys	FR [q1] [18.5h] [2 Credits] 🌐
⌘ LCHM2340D	Didactics and epistemology of chemistry	Marc de Wergifosse (coord.) Nathalie Matthys	FR [q2] [19h] [2 Credits] 🌐

The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

MATH2A - Information

Access Requirements

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

Unless esity.

Specific professional rules

Successful completion of the Teacher Training Certificate (upper secondary education) leads to the award of the title of secondary school education specialist.

The [Réforme des Titres et Fonctions](#) ("Titles and Functions Reform"), in force since 1 September 2016, is intended to harmonise the titles, functions and pay scales of basic and secondary education professionals in French Community of Belgium networks.

It also aims to guarantee the priority of preferred titles over minimum titles and to establish a regime for titles in short supply.

AESS holders can learn which functions they can carry out and the pay scales from which they can benefit by [clicking here](#).

The university cannot be held responsible for any problems that students may encounter at a later date with a view to a teaching appointment in the French Community of Belgium.

Teaching method

Le programme se partage entre plusieurs types d'activités : des cours magistraux, des séminaires en petits groupes interdisciplinaires ou intradisciplinaires et une variété de stages (observation de pratiques enseignantes dans des classes, immersion durant 2 ou 3 journées dans une institution scolaire, pratiques d'enseignement en duo ou solo dans différentes classes et diverses filières d'enseignement).

L'implication active de l'étudiant dans la construction de ses savoirs est particulièrement sollicitée dans la réalisation et l'analyse de ses stages, dans les séminaires organisés en petits groupes et d'une manière générale dans les travaux individuels et de groupe qui fondent l'évaluation de plusieurs enseignements.

La charge de travail liée à l'ensemble du programme (aux 40 heures de stage d'enseignement notamment) est importante, elle exige un investissement sur une année académique. Elle n'est pas compatible avec la réalisation d'un autre programme pour plus de 30 crédits.

Evaluation

The evaluation methods comply with the

