Towards a European Higher Education Area

Curriculum Development Good Practice Guide

Council of Europe
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Joint Project 2009-2011
'Strengthening Higher Education in Bosnia Herzegovina (SHE III)

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by Stephen Adam

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1.

INTRODUCTION - THE NATURE, PURPOSE AND ORIGINS OF THE GUIDE

1. INTRODUCTION - THE NATURE, PURPOSE AND ORIGINS OF THE GUIDE

The process of curriculum development cannot be reduced to a simple set of procedures that, when followed, are guaranteed to produce exciting, relevant syllabi. No creative process is that simple - there is no perfect way for academic teams to undertake such an activity. Any prescriptive or mechanistic approach to curriculum development just does not work. This booklet should be viewed as a series of suggestions that act as an aid to good practice to be explored and combined with successful existing practice. It is primarily designed to be useful in the BiH educational context, taking into account resource realities and structural issues that currently exist.

Furthermore, this guide is not designed to endorse any particular theories of education and learning, nor to promote any given approach to the curriculum. It is for autonomous higher education institutions to determine their curricula. The guide is designed to act as a broad checklist of issues and developments that academics in the post-Bologna world might consider as they seek to improve what they deliver to their students. Certainly the demands of 21st-century higher education are constantly evolving and new dimensions such as: 'qualifications frameworks', 'level descriptors', 'employability', 'transferable skills', 'learning outcomes' and 'lifelong learning' are assuming greater importance.

The suggestions and materials in this guide were developed from the joint Council of Europe/European Commission project *'Strengthening Higher Education in BiH'* (SHEIII, 2009-2011), particularly the second component of the project, see Annex IV, which assisted with the realisation and testing of the *'Framework for Higher Education Qualifications in BiH'* (HEQF-BiH), see Annex III. This component was implemented in close cooperation with BiH universities and the Rectors' Conference and sought to develop a constructive approach towards integrating the new Bologna degrees and the existing BiH parameters for education, employment and social security.

This curricular design guide is one of the direct products of the current pilot exercise project, and grew from the series of workshops held from June 2009 to October 2010. The input and experience of the 45 BiH staff from both public and private universities, see Annex V, split into three curriculum development teams in the disciplines of Engineering, English Language Teaching and Economics/Marketing was crucial for the development of this work. These BiH staff explored, tested and helped refine the good practice ideas for curriculum development presented in this guide. Without the input of these dedicated staff this guide would not be possible.

The guide is not a free-standing document and should be used in conjunction with the materials presented and used in the pilot work all are available at the following Council of

Europe website.[1] In addition, curriculum development teams will also need to consult specialist texts and sources; some useful sources are listed in chapter 6.

Users of this guide are encouraged to examine the three example sets of curricula it contains (Appendix V, VI, VII) for Engineering (BSc Mechanical Engineering), English Language Teaching (MA in Teaching English) and Economics (BA Economics - specialisation marketing). Even though it was not possible to finalise these examples due to the project's limited duration the three working groups produced some interesting and innovative programmes of learning which are presented here as case studies.

It is a useful exercise to compare their approaches and solutions with what is produced in your own institution. In particular, to see how they presented their work, wrote their learning outcomes (at the level of the qualification and the module), included transferable skills, embraced the employability agenda, and created more student-centred learning, varied assessments, etc. Their solutions are not necessarily perfect but do give many good examples of possible ways forward. The example curricula produced by the working groups encompass most of the core modules (obligatory subject modules) for a qualification together with a selection of optional modules (that allow some choice and further specialism).

Due to time and resource pressures it was not possible to produce a full set of modules that encompasses complete qualifications. This is unfortunate because only when the description of a complete qualification exists can the full coherence of any programme of studies be measured. It only then becomes possible to establish if all the overall qualifications learning outcomes relate to the module learning outcomes and the various assessment requirements closely match the learning outcomes. These vital aspects are of crucial importance for curriculum development teams, those responsible for any internal quality assurance approval and those responsible for external quality assurance matters.

The guide is designed to act as a resource for those responsible for staff development and academics in curriculum development teams. It has eight chapters: (1) introduction, (2) on the pilot exercise and the context of the work, (3) on the important relationship between the various Bologna reforms and curriculum development, (4) a list of good practice issues that curriculum teams might consider, (5) conclusions and recommendations designed to promote national and institutional best practice BiH, (6) useful references, (7) glossary and (8) annex of relevant documents.

[1] Accessible at: www.coe.ba/SHEIII/FQHE-pilot

2.

THE BIH CONTEXT - THE PILOT EXERCISE PROJECT, USING AND TESTING THE BIH HIGHER EDUCATION QUALIFICATIONS FRAMEWORK

2. THE BIH CONTEXT - THE PILOT EXERCISE PROJECT, USING AND TESTING THE BIH HIGHER EDUCATION QUALIFICATIONS FRAMEWORK

There are formidable challenges that face BiH academia, which are exacerbated by current political, social and economic realities. The fragmentation of decision-making competence among 13 ministries at three levels (district, canton, entity and state) makes it difficult to implement a coherent educational policy within the country. The Framework Law for Higher Education was passed in July 2007 but is not fully implemented. BiH lacks an overall strategy for the development of higher education in this disjointed context.[2]

The eight public universities and more than 20 private higher education institutions face difficult problems in terms of their finance, infrastructure, resources, staffing, management, internal structures and curriculum content and design. The reform of the legal independence of faculties is underway but the achievement of integrated universities still lies sometime in the future. The reality for many BiH higher education institutions is one of real pressure on their resources, finances and staffing at a time when huge investment is required to modernise institutions, facilities and the curriculum. This is important as the Leuven Communiqué of 2009 aims at having national qualifications framework implemented and prepared for self-certification against the overarching Qualifications Framework for the European Higher Education Area (FQ-EHEA) by 2012. The substantial implementation of the HEQF-BiH by 2012 is a difficult target, which cannot be achieved without widespread institutional and curricula reform supported by all stakeholders.

This is the reality in which the pilot exercise project: '*Using and testing the BiH higher education qualifications framework (HEQF-BiH)*' took place. It is clear that the current economic and political environment is not particularly conducive to educational reform but reform is necessary for the wellbeing of current and future BiH citizens. In addition, omissions in the HEQF-BiH frustrated the efforts of the working groups. It was useful to help establish the broad standards for qualifications in the three Bologna cycles but the national qualifications framework is generic in nature and needs to be supplemented with other appropriate reference aids. It is also incomplete, as it does not establish clear rules and conventions to distinguish between three and four year first cycle qualifications and agreed use of academic titles. This is compounded by the problem that in BiH a three-year undergraduate degree is generally not recognised as a first cycle degree for employment

[2] Source: CoE/EC Madill Report 'A *fact-finding visit to Sarajevo 7-10 June 2010 to review and assess the need for expertise in higher education reform in BiH*' which can be accessed at http://www.coe.ba/web2/en/dokumenti/doc_download/570-report-on-a-fact-finding-visit-to-sarajevo-7-10-june-2010.html.

purposes. Furthermore there are profound difficulties in the progression of those holding three-year qualifications moving to second cycle qualifications. Such anomalies need to be resolved.[3]

A recommendation by the working groups aimed to help resolve some problems is as follows:

> 'Consortium developments should be encouraged and discipline-based teams from across the country should meet regularly. Existing BiH higher education institutions are hard-pressed and under resourced. National, inter-institutional subject teams should be created to work cooperatively on exchanging best practice, and ideas associated with new approaches to the curricula. In addition, subject groups constituted for the whole country (in the light of no other body or mechanism undertaking this task) should seek to agree binding new subject-based conventions associated with 3 and 4 year first cycle degrees and 1 and 2 year second cycle degrees and rules for the designation of science or arts, and joint (combined studies) degrees'.[4]

The arguments for fundamental educational change in the form of higher education curricula reform in BiH are simple and compelling. The recent history of the country, the current level of unemployment and the attendant problems of social deprivation, poverty, inequality and lack of economic growth underline the need for change. Higher education in particular is acknowledged as an important driver of economic, social and political development. Across Europe this necessity is universally acknowledged in the Bologna process. The realities facing education in BiH make the rethinking of educational programmes of paramount importance for the following reasons:

- Citizens with BiH qualifications have severe problems getting them recognised internationally as well as across the country. This restricts their opportunities for mobility and employment;
- Many of the existing BiH qualifications are no longer fit for purpose as their content and overall design is outmoded and inflexible. Many older qualifications fail to reflect the radical transformations in technology, business, industry and society that have taken place over the last 20 years. There is a need to re-examine the design, delivery and purposes of existing qualifications;
- Higher education institutions in BiH face accreditation, which will focus, in part, on the efficacy of the internal processes for the approval of new and re-approval of old qualifications. The quality and standards of the curricula will be under intense scrutiny;Employers within and outside the country require different skills and knowledge sets that relate to new technologies and lifelong learning contexts;

[3] Further discussion and advice on some of these issues can be found in *'Guidance on the use and acquisition of academic and scientific titles in Bosnia Herzegovina'* which can be accessed at: http://www.coe.ba/web2/en/dokumenti/doc_download/962-guidance-on-the-use-and-acquisition-of-academic-and-scientific-titles.html

[4] The full set of project conclusions and recommendations can be found in Annex IV.

- Students require more flexible learning methods better attuned to their needs and abilities and qualifications that improve their employability and are delivered in innovative more student-centred ways;
- Industry and commerce in BiH require rebuilding, based on a high quality, knowledge-based and skilled workforce, in order to promote the long-term economic growth, stability, employment and the wellbeing of future generations.

The development of new, and the revision of old, curricula cannot provide universal solutions to all problems but is a significant dimension of any medium and longer term solution. Those responsible for planning the pilot exercise project took the view that effective change had to be bottom-up and focus on university staff and institutional level developments. It was assumed that the existing difficult situation was one where some positive progress was possible without assuming any unrealistic injection of resources. However, it is evident that some dedicated funding, prioritisation and commitment at government and institutional levels will be necessary or no serious progress in curriculum reform is possible.

In this context the pilot exercise project 2009-2010 was specifically designed to support BiH universities and:

- To test and demonstrate the use and benefits of the framework for higher education qualifications for BiH against existing or new qualifications.
- To apply the framework to three particular fields of study across institutions in BiH - with the active participation of public and private universities.
- To develop examples of modular curricula for three different qualifications.
- To develop tools for curricular design and internal and external course validation and quality assurance that can be used to reproduce the exercise and further implement the framework for other qualifications.
- To create a group of experts in the mentioned areas that will assist higher education institutions to reproduce the exercise and further implement the framework for other qualifications.

The testing phase of the pilot was successful and the five objectives listed above were completed (see Annex IX that contains the final conclusions/recommendations from the piloting exercise). This guide is one of the products of the work. The guide also contains the curriculum examples produced by the three working groups presented in the form of common qualification and module templates, see Annexes VI, VII and VIII. These are produced by discipline-based groups of BiH academics for illustrative purposes only. They are not intended to be imposed on institutions - they are useful examples. Every BiH higher education institution should produce, and be responsible for, its own unique study programmes that reflect their expertise and local context. The Bologna process values diversity and academic autonomy. Obviously, institutions may well wish to make use of some parts of what has been reproduced.

3.

THE BOLOGNA CONTEXT - CURRICULA REFORM IN THE 21ST CENTURY

3. THE BOLOGNA CONTEXT - CURRICULA REFORM IN THE 21ST CENTURY

The intergovernmental Bologna Process is now into its second decade. On 12 March 2010, the 47 Ministers of participating countries adopted the Budapest-Vienna Declaration and officially launched the European Higher Education Area (EHEA) designed to ensure more comparable, compatible and coherent systems of higher education in Europe. The Bologna reform agenda encompasses multiple aspects of higher education including:

- Easily readable and comparable degrees organised in a three-cycle structure (e.g. bachelor-master-doctorate): Countries are currently setting up national qualifications frameworks that are compatible with the overarching framework of qualifications for the European Higher Education Area and which define learning outcomes for each of the three cycles.
- Quality assurance in accordance with the 'Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)'.
- Fair recognition of foreign degrees and other higher education qualifications in accordance with the Council of Europe/UNESCO Recognition Convention.

Bosnia and Herzegovina joined the Bologna Process in 2003 and ratified the 1997 Council of Europe/UNESCO '*Convention on the Recognition of Qualifications concerning Higher Education in the European Region*' - known as the Lisbon recognition convention. Progress has been made in all the areas listed above but the reform has been difficult and slow, particularly in implementing improvements at the institutional level. Top-down reform must be matched by compatible bottom-up development.

Curricula reform is an essential aspect of the Bologna Process and is directly related to the following Bologna tools and objectives which BiH design teams should be aware[5]:

a. EXTERNAL REFERENCE POINTS AND CURRICULUM DEVELOPMENT (QF)

At the heart of the Bologna Process are a few simple devices that are designed to help those responsible for curriculum development and the maintenance of standards. Collectively these can be classed as external reference points and include: the overarching Framework of Qualifications of the European Higher Education Area (FQ-EHEA); new national

[5] A Powerpoint titled '*Bologna: a revolutionary set of tools to facilitate real (not decorative) educational reforms*' was presented to the BiH Stakeholder event, May 2009, and introduces a number of general considerations about the Bologna Process. This can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance.

qualifications frameworks based on level descriptors; Diploma Supplements/Europass; new quality assurance standards; international subject and sector benchmark statements. These reference points aid curriculum design teams who can link their qualifications to these independent indicators that help establish level, standards and international recognition. The most notable BiH external reference point is the '*Framework for Qualifications in Bosnia and Herzegovina*' (HEQF-BiH) which, when fully implemented, has an important function for those responsible for curriculum development and quality assurance. Two of its objectives are:

- create and maintain international comparability of standards, especially in intra-institutional, inter-institutional, regional and European contexts; and to facilitate mobility for all (students, academic and non-academic staff, citizens);
- eradicate inconsistency and confusion between higher education qualifications by a clear description of qualifications in terms of cycle/level, learning outcomes and credit;

b. STUDENT-CENTRED LEARNING

The notion of student-centred learning was introduced in the Leuven Communiqué of 2009, which reasserted the importance of the teaching mission of higher education institutions and the necessity for ongoing curricular reform geared towards the development of learning outcomes. Student-centred learning requires empowering individual learners, new approaches to teaching and learning, effective support and guidance structures and a curriculum focused more clearly on the learner in all three cycles.[6] Curricular reform will thus be an ongoing process leading to high quality, flexible and more individually tailored education paths. The Bologna ministers also asked that higher education institutions pay particular attention to improving the teaching quality of their study programmes at all levels. Student-centred learning is about focusing on the needs of students as opposed to those of educators. This has serious implications for curriculum design, content, delivery, assessment and the role of the teacher (it emphasises the role of the professor as a facilitator). It is a way of empowering the learner in all forms of education, providing the best solution for sustainable and flexible learning paths. This sort of development is very new and difficult for BiH institutions - as it is for many European countries.

c. MOBILITY AND CREDIT SYSTEMS: STUDENT, STAFF, COURSE, MODULE, INTERNSHIPS

Increasing the mobility of staff, students and graduates is one of the core elements of the Bologna Process, creating opportunities for personal growth, developing international cooperation between individuals and institutions, enhancing the quality of higher education and research, and giving substance to the European dimension. Unfortunately

[6] The European Students Union (ESU) have just published a very useful online (2010) *Student-centred Learning Toolkit for students, staff and higher education institutions*. Available at: http://esu-online.org/documents/publications/SCL_Toolkit_ESU_EI.pdf

for BiH many obstacles to mobility exist, especially with regard to: incentive for students to travel, visas (residence and work permits); the recognition of qualifications (national and international, old and new); financial barriers (including portable student loans and grants); and creating long-term student exchanges (with balanced flows). Certainly mobility is important for personal development and employability. The European Credit Transfer and Accumulation System (ECTS) is a powerful tool to help international student exchanges and suitable opportunities (mobility windows) need to be embedded in BiH programmes of learning. Although ECTS credits are used within BiH higher education they can be problematic. The Bologna ministers in the 2009 Leuven Communiqué committed themselves to the highly ambitious target of:

> 'In 2020, at least 20% of those graduating in the European Higher Education Area should have had a study or training period abroad...Within each of the three cycles, opportunities for mobility shall be created in the structure of degree programmes. Joint degrees and programmes as well as mobility windows shall become more common practice. Moreover, mobility policies shall be based on a range of practical measures pertaining to the funding of mobility, recognition, available infrastructure, visa and work permit regulations. Flexible study paths and active information policies, full recognition of study achievements, study support and the full portability of grants and loans are necessary requirements. Mobility should also lead to a more balanced flow of incoming and outgoing students across the European Higher Education Area and we aim for an improved participation rate from diverse student groups.'

This is a formidable set of aims for BiH educationalists especially given travel, work and visa difficulties. However, the current obstacles should not serve as a convenient excuse to justify inaction.

d. THE EMPLOYABILITY AGENDA

When the Bologna Ministers met in May 2007 in London, they identified employability as one of their priorities. Employability is now one of the main goals to be achieved with the creation and further development of the European Higher Education Area (EHEA). There are many definitions of employability. For the purpose of the Bologna Follow-up Group, employability is defined as the: '*ability to gain initial employment, to maintain employment, and to be able to move around within the labour market*'. The role of higher education in this context is to equip students with skills and attributes (knowledge, attitudes and behaviours) that individuals need in the workplace and that employers require, and to ensure that people have the opportunities to maintain or renew those skills and attributes throughout their professional working lives. At the end of a course, students will thus have an in-depth knowledge of their subject as well as generic employability skills. These generic 'transferable' skills include those associated with self-management, problem solving, communication, information technology, teamwork, etc. The current Bologna emphasis on employability is designed to empower the individual

fully to seize the opportunities in changing labour markets. It also seeks to encourage institutions to be more responsive to employers' needs, and for employers to have a better understanding of the educational perspective. This is often aided by integrating work-based learning (WBL) opportunities into the curriculum, creating opportunities for internships and recognising prior formal and informal learning that takes place outside the academic institution. However, it is important that the employability agenda does not dominate the curriculum, which must not just be about jobs but developing the citizen in a democratic society and transmitting cultural heritage.

In BiH it is not easy to develop practical ways to enhance the employability of students. It is especially hard to develop sufficient internship opportunities, linkages with companies and work-based learning opportunities. Despite this inventive ways can be found to redesign the curricula and forge links with business and industry.[7]

e. THE LIFELONG LEARNING AGENDA - RECOGNITION OF INFORMAL AND NON-FORMAL LEARNING

The Bologna process has always had a lifelong learning dimension but this has been slow and difficult to embed within institutions and national education systems. Lifelong learning was recognised as an essential element of the EHEA as early as 2001, the Prague Communiqué signalled that:

> 'in a future Europe built on a knowledge-based society and economy, lifelong learning strategies would be necessary to face the challenges of competitiveness and the use of new technology, and to improve social cohesion, equal opportunities and quality of life'.

Lifelong learning is a crosscutting issue, which in the higher education context relates to learning outcomes, credit-based curricula and flexible learning paths, national qualifications frameworks and the recognition of prior learning, including informal and non-formal learning. In this context the 2008 European University Association (EUA) European Universities' Charter for Lifelong Learning, provides an important set of lifelong learning commitments agreed by universities.[8] The 2009 Leuven Communiqué highlighted the need for lifelong learning in order to widen participation as an integral part of our education systems. Lifelong learning implies that qualifications may be obtained through flexible learning paths, including part-time studies, as well as work-based routes. This agenda is new for many European institutions and posed many challenges to their diversity, aims, organisation and curricula. There is often distrust about recognition of

[7] Some useful strategies and information about improving employability can be found at the UK Higher Education Academy (HEA) website which can be accessed at: http://www.heacademy.ac.uk/ourwork/teachingandlearning/employability. There are also many publications in English accessible on the web on: 'employability skills', 'employability skills maps', 'subject-based employability skills profiles' and 'employability strategies' - to help embed employability in the curriculum.

[8] The EUA Charter can be accesses at: http://www.eua.be

prior learning (RPL) especially experiential learning for the purposes of giving exemptions from parts of qualifications and/or entry to them. It should only be applied where robust quality assurance mechanisms are in place.

f. INTERNAL AND EXTERNAL QUALITY ASSURANCE AND CURRICULUM DEVELOPMENT (E4 STANDARDS AND GUIDELINES)

The Bologna process has increasingly focused on the quality of European higher education and the E4 group developed the 'Standards and Guidelines for Quality Assurance in the European Higher Education Area' (ESG), which were adopted by Ministers of Education in 2005.[9] The ESG defined common European standards for internal and external quality assurance in order to provide higher education institutions and quality assurance agencies across 47 countries with common reference points. In parallel, common requirements for national systems were defined at European level to improve the consistency of European quality assurance schemes. In addition, the 'European Quality Assurance Register for Higher Education' (EQAR) was established in 2008 to provide information about trustworthy quality assurance agencies working in Europe. In BiH the Agency for Development of Higher Education and Quality Assurance (HEA) was established by the Framework Law on Higher Education in 2008. The HEA gained associate status with the European Network for Quality Assurance in Higher Education (ENQA) in February 2010.[10] The external accreditation of all BiH higher education institutions is to take place in the near future using Bologna compliant tools and processes. Institutions will need to demonstrate that they have effective internal processes for the development and approval of their qualifications.

[9] The E4 Group comprising the European representative bodies of quality assurance agencies (ENQA), students (ESU), universities (EUA) and other higher education institutions (EURASHE), and are the key stakeholders of quality assurance in higher education. The E4 Standards and Guidelines (ESG) can be accessed at: http://www.egar.eu/uploads/media/050221_ENQA_report_01.pdf

[10] Information about the BiH Agency for Development of Higher Education and Quality Assurance (HEA) and its work can be accessed at: http://www.hea.gov.ba

4.

CURRICULUM DEVELOPMENT GOOD PRACTICE ISSUES FOR CONSIDERATION

4. CURRICULUM DEVELOPMENT GOOD PRACTICE ISSUES FOR CONSIDERATION

Curriculum development, as previously mentioned, is not a mechanical process - it involves numerous elements, so that every time it is undertaken the method, sequence and context will differ. There exist a large number of excellent publications that cover curriculum development in more depth on the various points and issues raised below and these should be consulted. Chapter 6 contains a small selection of useful reference and further information sources. There is also much excellent information published by European universities, free and available for download from the web. The following list of good practice issues for consideration should not be regarded as definitive and the order is not necessarily significant.

a. AWARENESS OF WIDER CONFLICTING EPISTEMOLOGICAL APPROACHES (PRAXIS, PROCESS, OBJECTIVES THEORIES)

Curriculum development teams should be aware of the epistemological arguments and theories that underpin various positions regarding the teaching and learning process. Are there any particular ideas that support their approaches to curriculum building? What are the goals they seek and are they the same as the needs of the student? What learning experiences do they consider valid and invalid - and why? How can learning experiences best be organised? Are learning outcomes appropriate, and if so, can they be evaluated? What are the objections and advantages to a behaviourist or other approach to the curriculum? What are the benefits of adopting a 'process approach' to the curriculum that emphasises an empiricist methodology? There is considerable literature on recent thinking on higher education and in particular how different domains of knowledge, skills, competences and practice interact.[11]

It should be recognised that the Bologna Process does encapsulate a particular approach to teaching and learning that prioritises an output/outcome focus aimed at increasing educational transparency and establishing a system that has a common national understanding of standards and quality assurance. It is important that this is not interpreted to create a crude mechanistic tick box mentality where learning is reduced to incremental, simplistic components that ignore creativity, spontaneity and complexity. This would damage higher education. It is not suggested that curriculum development teams should spend time on lengthy philosophical debates but that they do need to be aware of

[11] A useful short introductory article on *'Curriculum Development'* by Dr Judith Howard, Department of Education, Elon University, North Carolina USA can be accessed at: http://org.elon.edu/catl/documents/curriculum%20development.pdf

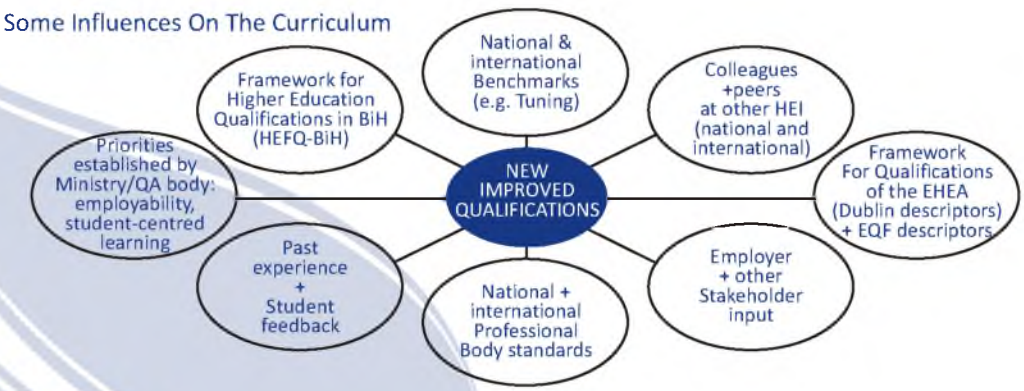
some of the dangers and pitfalls associated with any unreflective and crude application of Bologna approaches such as learning outcomes, student-centred learning, etc.

b. NEW INFLUENCES ON COURSE DESIGN AND PLANNING

Curriculum designers now have a range of useful reference points to help them in their work. Traditionally in Europe, some sort of Ministry mechanism tightly controlled new curriculum approval whilst any curriculum development work was often undertaken by senior academics within institutions. These academics, often in autonomous faculties, functioned independently from the parent university. This reflected the situation where higher education institutions had little academic autonomy, were not integrated, and the state apparatus dictated or controlled an often very traditional and inflexible syllabus. The Bologna Process assumes a massive change to this situation. Institutional autonomy is a cornerstone of higher education reforms and the new systems of quality assurance that buttress it. Teams of discipline-based academics have responsibility for delivering the curricula and are answerable for their creation. In return for increased autonomy institutions have to assume more responsibility. The whole process is more democratic and open. New qualifications and revised old qualifications are required to go through strict internal quality assurance processes and institutions responsible for these will have to defend and explain their arrangements to the external quality assurance body (in BiH the HEA).

Unfortunately, many traditional qualifications have suffered from a number of drawbacks. They had long study cycles with a high dropout rate, were quite inflexible as far as choice and study mode, and did not equip students for employment. Qualifications that have been revised using the Bologna-inspired approaches amounting to a paradigm change, can be more flexible, include more transferable skills valued by employers, contain some sort of mobility window, and meet common European standards. However, this characterisation between 'old' and 'new' qualifications must not be overstated. Traditional qualifications have many strengths; excellent content, delivery and assessment approaches, refined over many years. These elements should not be rejected but incorporated into new, improved programmes of learning.

A range of new elements now exists to inform and support academics creating qualifications. The following is a diagrammatic representation of some of these:



Curriculum development teams should consider these elements to help them establish the standards, content and purposes of their qualifications. Whatever the situation, there must be a healthy discourse within curriculum development teams that focuses on innovation, flexible learning paths as well as student, citizen, employer and societal needs. A set of Powerpoints titled '*BiH Curriculum developmen*t' were produced and discussed at the project at its Zenica meeting in October 2009.[12] These cover a number of broad issues including student-centred learning, employability, old versus new qualifications.

c. THE CURRICULUM DEVELOPMENT CYCLE

To view curriculum development as a cycle helps highlight the fact that the curriculum is not something to be regarded as set in stone. Qualifications are created, often improved over time, but eventually become less relevant and no longer fit for purpose. Even if things were included or had some priority in the past, it is good practice to reconsider all aspects when reviewing an existing qualification or developing a new one. A useful approach is to undertake a process of curriculum auditing. This can involve a themed and targeted examination of an existing qualification to see how far it aids development of the subject discipline, employability, student-centred learning, transferable skills, etc. Subject disciplines are dynamic areas and the knowledge, skills, and understanding associated with them constantly change. New disciplines can arise and new mixtures of subject fields can yield exciting and constructive combined studies qualifications, e.g. a graduate with a joint degree in Chinese and Business studies can expect exciting employment opportunities. It is also good practice annually to review existing qualifications and make minor changes (via any approved internal validation/approval mechanism) as necessary.[13] This should not be confused with any major review that examined every aspect of existing qualifications and the experience associated with it in the previous four or five years.

When undertaking any curriculum building exercise it can be useful to group issues associated with such an exercise in terms of micro and macro issues. The curriculum development teams in the project discussed two sets of Powerpoints titled '*Curriculum Building - macro issues*' and '*Curriculum Building- micro issues*'.[14] The macro issues touched on: the Bologna paradigm shift; module size; qualification profile; the learning chain; level and progressions within qualifications; employability; and external reference points. Micro issues included: learning outcomes at programme and module level; multiple factors impacting on design; consideration of the teaching-learning-assessment relationship; evidence of the achievement of learning outcomes and quality assurance issues.

[12] These Powerpoints can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance

[13] The extent of 'minor changes' allowable and the process for their approval is strictly regulated and designed to allow small changes to the curriculum associated with, e.g. updating, rectification of unsuccessful assessment tasks, etc.

[14] These Powerpoints can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance

d. WHAT IS THE QUALIFICATION PROFILE?

A useful starting point for curriculum design is consideration of the profile of the qualification.[15] There are a number of things to consider as the profile can have several meanings. In the context of the curriculum development project profile refers to the characteristics of the individual qualification in question. Curriculum development teams will seek to build qualifications that reflect a number of things including: their expertise; the boundaries of the subject field; a balance between specialisation (subject specific knowledge and skills) and generalisation (transferable skills); the focus and remit of the institution; and obviously the needs of students, society and industry. In so doing they will also be drawn into a variety of technical decisions concerning, e.g. the level, workload, and credit value associated with the qualification. Furthermore, it is beneficial if curriculum development teams give detailed consideration to the purposes and context of the qualifications. This can include some market research, reflections about past and future demand, and potential for cross-disciplinary and interdisciplinary elements.

Going to a deeper level of discussion it is useful for curriculum development teams to ask themselves the following three sets of questions adapted from those originally developed by the UK Quality Assurance Agency (QAA).[16]

What do we want our students to achieve?

'What' may include subject knowledge and understanding, a range of intellectual, subject based, and transferable skills, and their application in a range of contexts, and perhaps also competency to practise. Qualification learning outcome statements can be created by completing sentences like:

- This programme is distinctive because it develops...
- The most important values which inform this programme are...
- The academic content of this programme concentrates on...
- The most important intellectual skills developed in the programme are...
- The most useful practical skills, techniques & capabilities developed are...
- Competency will be developed in...
- The most important ways in which a student will learn are...
- On completing the programme we want students to know & understand...
- On completing the programme we want students to be able to....

[15] An excellent discussion of profile and 'qualifications' in general can be found in Sjur Bergan's book (2007) '*Qualifications - An introduction to a concept*', Council of Europe higher education series No.6

[16] These questions were presented as part of a Powerpoint presentation given at the Mostar meeting, November 2009 titled, 'Information on Qualifications' which can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance. The questions are derived from a UK Quality Assurance Agency (QAA) document Annex 1 on 'Developing programme Specifications' that can accessed at: http://www.qaa.ac.uk/academicinfrastructure/programSpec/guidelines06.asp#annex1

What reference points can we use to show that what we want students to achieve has currency within the academic, professional or employer communities?

- institutional mission statements and any institutional policies on the development of general skills in fields such as communication, information technology, team working and career management.
- BiH National Qualifications Framework (HEQF-BiH).
- Occupational standards in fields where these are relevant.
- Relevant European or international reference points (FQ-EHEA, subject benchmark and Tuning statements, BiH HEA documents/guidance, etc.).

How do we expect our students to achieve and demonstrate the intended outcomes?

Consider the teaching, study and assessment methods used to promote learning. Some methods are more appropriate than others for developing particular types of learning outcome. For example:

- knowledge and understanding of a subject is often developed through lectures and seminars.
- intellectual skills such as analysis, synthesis, evaluation, and problem solving may be practised and demonstrated through more active learning processes involving assignments or projects, group-learning activity such as a seminar or tutorial, laboratory, workshop, or field-based activity.
- practical skills need to be developed through opportunities to practise the activity in an appropriate learning context (e.g. in laboratory, field, or workplace placement).
- transferable/key skills, that are readily transferable to employment and other contexts, such as communication, teamwork etc can be developed through naturally arising opportunities within the curriculum.

e. ECTS, CREDITS, MODULARISATION AND CREDIT ALLOCATION PROBLEMS

The European Credit Transfer and Accumulation System (ECTS) has been in existence in different forms since the late 1980s. It has been transformed from a simple credit transfer tool designed to improve international student mobility to become a major Bologna device to help curricula reform and improve lifelong learning. The ECTS website states:

> 'ECTS makes teaching and learning in higher education more transparent across Europe and facilitates the recognition of all studies. The system allows for the transfer of learning experiences between different institutions,

greater student mobility and more flexible routes to gain degrees. It also aids curriculum design and quality assurance.'

The successful implementation and use of credits and modular systems has not proved easy for European countries for a number of reasons. The publication of the heavily revised version of the '*ECTS User's Guide*', in February 2009 now provides better guidance and advice in terms of organizing and developing credit-based curricula.[17] Unfortunately, the credit regulations previously put into law pertain to the old versions of ECTS which is now outdated and inappropriate. Furthermore, the introduction of learning outcomes linked to workload, as the basis of credit, means that for many institutions the current approach they have may well be obsolete. Many European institutions have also experienced severe difficulties with the internal process of credit allocation and still incorrectly rely on allocating credits to modules exclusively on a time-based workload approach.[18]

The use of sophisticated, modular credit-based systems within an institution has many benefits as well as challenges for the curriculum developer. Modular credit-based systems can:

- Facilitate choice and interesting subject combinations - interdisciplinary + multi disciplinary and joint degree programmes **(but what is acceptable and feasible?)**
- Facilitate transfer student mobility + course mobility **(how much mobility is reasonable and feasible?)**
- Help us consider workload and assessment loads **(what is acceptable?)**
- Make us focus on learning outcomes **(but which ones, and how should they be written and assessed?)**

When creating a curriculum in the context of a credit system a number of considerations need to be borne in mind - some of these are technical, some academic and some will be taken at an institutional level, whilst others are purely decisions for the curriculum design team. It is not possible to include a complete list and explain every issue. The following are just some aspects that will require consideration[19]:

[17] The ECTS Users' Guide 2009 is accessible for download in six languages from: http://ec.europa.eu/education/lifelong-learning-policy/doc48_en.htm

[18] Unfortunately there are multiple definitions of 'module'. In this guide 'module' refers to a standard sized course unit where each unit carries the same number of credits, or multiple of thereof. Thus an undergraduate three-year degree worth 180 ECTS credits might be divided into eighteen discrete modules of ten credits each. Where necessary double modules can be created. Some credit-based modular systems may assign five credits to each module and thus have more modules within the qualification. The number of credits allocated to a module has obvious implications for the structure of the qualification, the fragmentation of studies and coherence of the learning experience.

[19] In addition to this list a Powerpoint titled '*Steps*' used at the October 2009, Zenica meeting explores issues associated with modules. This can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance.

- Credit allocation decisions concerning the number of credit in a module (which has huge implications on the structure of the qualification and learning experience) - what multiple module sizes are feasible and necessary?
- The relationship and number of 'core' and 'option' modules and pure 'free choice' modules.
- Rules about progression and the level of the modules to be studied.
- Pre-requisites and co-requisite regulations.
- Opportunities and limits for the recognition of prior learning (RPL) including formal and informal learning.
- Opportunities for mobility - credit transfer/student exchanges and work-based learning (WBL) including internships.

The effective use of credits and credit systems can be of huge advantage to the curriculum developer who seeks to introduce flexibility and choice into the qualification. Unfortunately, credits systems can easily become over-complex and difficult for all to understand. Complex credits systems need to be introduced with great sensitivity and with a clear set of purposes in mind. Systems that are not well thought out often appear to present wide module choices and alternative sets of learning modes and pathways, but in reality module scheduling prevents this happening.

f. WRITING GOOD LEARNING OUTCOMES FOR QUALIFICATIONS AND MODULES

The creation of good learning outcomes that are of an appropriate level, nature and that can be assessed is a formidable task. The transformation of the curricula presented in an output-focused way is perhaps the biggest challenge to academics used to traditional input-focused syllabi that list content. Learning outcomes put the emphasis on the learner and are therefore very much part of student-centred learning. There is considerable literature available on learning outcomes.[20] Learning outcomes permeate, and now underpin, most of the Bologna reforms and are highlighted in the various Ministerial Communiqués. They are complex educational tools that are easy to misuse. Learning outcomes are statements of what a learner is expected to know, understand and be able to demonstrate at the end of a learning experience. They are explicit statements about the outcomes of learning the results of learning. They are usually defined in terms of a mixture of knowledge, skills, abilities, attitudes and understanding that an individual will attain as a result of his or her successful engagement in a particular set of higher education experiences. In reality, they represent much more than this. They exemplify a particular methodological approach for the expression and description of the curriculum (modules, units and qualifications) and levels, cycles, subject benchmark statements and the 'new style' Bologna qualifications frameworks.

Learning outcomes are often expressed thus: '*on successful completion of this module/qualification the student will be able to …*'. They are used to describe modules, qualifications, level descriptors, assessment and grading criteria, national qualifications

[20] Pilot project Powerpoints introducing learning outcomes are accessible at: www.coe.ba/SHEIII/Curriculum-Development-Guidance.

frameworks (e.g. HEQF-BiH), the Bologna overarching framework (FQ-EHEA), and various subject and sector benchmark statements. It is arguable that the main end product of the Bologna reforms is improved qualifications based on learning outcomes and certainly not just new educational structures. For this sort of bottom-up reform it is recognised that there is a need for fundamental change at the institutional level where academics are responsible for creating and maintaining qualifications.

The introduction of learning outcomes is often problematic as they are frequently met with strong and widespread scepticism by higher education staff. They are often viewed as a threat that will dumb down education and constrict academic studies by reducing them to mere 'tick box' training and rote learning. These objections should be taken seriously, as learning outcomes, if poorly conceived and badly implemented, can damage education.

Some useful good practice points in the creation and implementation of learning outcomes include:

- Writing good learning outcomes takes time and reflection.
- It is pointless to write them to fit existing, unmodified/unchanged modules.
- The benefits in the creation of learning outcomes result from the dynamic and cathartic process of creation. This will involve a simultaneous reflection on possible learning outcomes, their mode of delivery and their assessment.
- The creation of learning outcomes is not a precise science and they require considerable thought to write it is easy to get them wrong and create a learning straitjacket.
- Learning outcomes are commonly further divided into different categories of outcomes. The most common sub-divisions are between subject specific outcomes and generic (sometimes called transferable or transversal skills).
- Good learning outcomes are the product of sincere reflection about realistic and attainable combinations of any of the following: knowledge and understanding, practical skills (including applying knowledge and understanding), subject specific and transversal/transferable skills, etc. (see Bloom's taxonomy: cognitive, affective and psychomotor domains).
- Learning outcomes should be fit for their purpose + appropriate for the user in question.
- Regular stakeholder input (at some stage) is important in the creation and review of learning outcomes.
- Sensitive and constructive support from appropriate national authorities is important to sustain the effort required at institutional level.
- The introduction of learning outcomes at an institutional level requires a carefully tailored strategy and the primary goal should be quality enhancement - never just compliance with outside (national, ministry or quality assurance agency) edicts.
- At the level of the module and individual qualifications learning outcomes must be written in the context of appropriate national and international external reference points.
- Learning outcomes must be capable of assessment. Applied at the level of the individual module they should be linked to comprehensive assessment criteria, also expressed in terms of learning outcomes.

- It is important to ensure that at the institutional level not only is assessment directly linked to learning outcomes but also firmly aligned with an appropriate delivery strategy. Teaching, learning and assessment are intimately linked in the process of curriculum development.

Unfortunately, there are plenty of examples of poor learning outcomes that fail at both ends of the spectrum they are either over-prescriptive or are too vague, and fail to inform about the level and nature of any skills, understanding and abilities that are to be acquired. Beware the following pitfalls:

- Avoid the use of simplistic terms such as 'understand' or 'explain' as these are imprecise and convey little. Active verbs should be used.
- Generic qualifications descriptors, subject specific benchmarks/sector statements and national level descriptors should always be viewed as guidance only. They are not straitjackets.
- Existing qualifications should never be repackaged with newly minted but fake learning outcomes used to decorate old and substantially unchanged units.
- Beware of creating an assessment-driven curriculum where learning outcomes are over-prescribed and confine the learner's ability to make imaginative jumps and insights.
- The adoption of learning outcomes should never be regarded as part of a move towards the national or European standardisation of content. This is not the purpose of Bologna and is inimical to higher education reform.

The use of learning outcomes is no universal panacea to solve all curriculum development problems. They are just a helpful tool. It should be remembered that when creating learning outcomes at module level (often 6-8 for each module) these will need to be cross-checked with the overall set of learning outcomes (often 6-8 that encapsulate the whole qualification). Certainly, a qualification is more than just the sum of its parts. The project working group teams found it useful to complete a 'matrix grid' that showed the relationship between the HEQF-BiH individual descriptors and each of the modules that constituted the qualification. Examples of completed matrix grids can be found in Annex VI, VII and VIII, and Annex II contains blank templates. The use of such a matrix shows the curriculum designer (and programme approver) which modules relate to which level descriptors and where omissions and wasteful duplications exist.

g. CHECKING LEARNING OUTCOMES: LEVEL AND THE OUTCOME-DELIVERY-ASSESSMENT RELATIONSHIP

It is essential to create learning outcomes at the appropriate level for the qualification in question. As previously mentioned there are various aids to help establish the appropriate level including the matrix grid mentioned above that links to the HEQF-BiH, the FQ-EHEA, subject benchmark and sectoral descriptors. Once the learning outcomes have been initially conceived (at the level of the module and the qualification) they need to be made concrete - how they will be delivered and how they are assessed. The outcome-delivery-

assessment relationship is crucial. Learning outcomes that cannot be assessed must be disregarded. A variety of apposite assessment methods should be considered to reflect the various skills, knowledge, abilities and understanding required. These also need to reflect real world contexts where teamwork, research skills, decision making, problem solving and dispute resolution are important.[21] This sort of consideration also helps to make the curriculum more relevant in terms of employability skills.

A useful checklist of alternative assessment methods can be accessed from the Oxford Brookes University.[22] This list, developed by the Oxford Centre for Staff and Learning Development, presents appropriate assessment tools under eight broad headings associated with: (1) thinking critically and making judgments; (2) solving problems and developing plans; (3) performing procedures and demonstrating techniques; (4) managing and developing oneself; (5) accessing and managing information; (6) demonstrating knowledge and understanding; (7) designing, creating and performing; and (8) communicating. They also produce a useful parallel list of transferable skills.[23]

h. IMPLEMENTING, MONITORING AND EVALUATING THE CURRICULUM MODULE/QUALIFICATION TEMPLATES

A final important aspect for consideration concerns the quality assurance dimension to curriculum development. Whatever curriculum teams produce must be in a form that is suitable for the internal institutional process where it gains approval to run within the university. The E4 '*Standards and Guidelines for Quality Assurance in the European Higher Education Area'* (ESG) and the 'BiH *Standards and Guidelines for Quality Assurance in Higher Education'* (BiH SG) provide clear guidance for institutions on internal quality assurance. Institutions should have a policy and associated procedures for the assurance of the quality and standards of their programmes and awards. This must include: approval, monitoring and periodic review of programmes and awards; assessment of students; quality assurance of teaching staff; learning resources and student support; information systems. Achieving these elements is greatly enhanced by having clear descriptions of qualifications and modules.

It is important to consider exactly what information is required to describe a qualification for validation and review for internal purposes when new and/or revised qualifications

[21] An excellent text on assessment of learning outcomes is the recent set of Irish reports '*Technical aspects of designing and redesigning programmes/awards for inclusion in the national framework of qualifications*' (NQF) the part three report covers '*The assessment of learning outcomes'* and is accessible at:
http://www.nfqnetwork.ie/Section_1_Final/Default.140.html .
In addition, Jenny Moon has written an good text adapted for the EHEA titled '*Linking levels, learning outcomes and assessment criteria' which is available at:*
http://www.lut.fi/fi/lut/studies/learningcentre/report/Documents/lo_linking_lev_ac_europe.pdf

[22] The document is titled '*selecting assessment methods'* and can be accessed at: http://www.brookes.ac.uk/services/ocsd/2_learntch/methods.html

[23] This can be accessed at: http://www.brookes.ac.uk/services/ocsd/2_learntch/trans_skills.html

have to go through appropriate internal approval processes. In addition the 'external' quality assurance examination of an institution by the BiH HEA agency will require documentary evidence of internal processes and documents need to be fit for this purpose. It is important to try to produce documentation that can be useful for a range of different contexts and audiences, including students, employers and parents. This can reduce the workload on staff by allowing them to use similar (or slightly adapted) materials for different purposes. The working groups in the pilot project discussed the nature and presentation of materials for the purpose of validation (approval) of new and revised qualifications at its November 2009 Mostar meeting. It considered a set of Powerpoints titled '*Information on qualifications for students, employers, quality assurance, audit-validation-review*'.[24] It is clear that there are some important distinctions between what information is required for the purposes of validation and that needed by students in a student handbook. It is for autonomous institutions to make decisions about what information they will provide for different audiences.

The working groups in the BiH curriculum development teams agreed that Qualification Templates and Modules Templates were a useful way to present information specifically for validation and review purposes. These templates also helped curriculum development teams to focus on and present key elements. Two templates (blank forms with suggested headings and sub-sections) were produced so that the working groups could produce information for their example qualifications and modules following a common sequence and layout. These blanks are reproduced in Annex I. They include some explanatory notes to give guidance on the completion of different sections. Examples of completed templates can be found in Annexes VI, VII and VIII.

[24] These Powerpoints, which heavily rely on UK Quality Assurance Agency (QAA) materials, can be accessed at: www.coe.ba/SHEIII/Curriculum-Development-Guidance

5.

CONCLUSIONS - TOWARDS BEST PRACTICE IN BIH

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The pilot project found that the HEQF-BiH has benefits for both curriculum developers and quality assurance purposes. However, it has limited use on its own. Curriculum developers and those responsible for quality assurance also need to consult sectoral (Tuning) statements /benchmark statements (subject specific indicators) and other external reference points (foreign qualifications frameworks), etc. More detailed level descriptors like these help academic staff to build in meaningful progression over 3-4 year first cycle and 1-2 year second cycle studies. The HEQF-BiH is useful to help establish the broad standards for qualifications in the three Bologna cycles but it is generic in nature and needs to be supplemented with other appropriate reference aids.

The process of curriculum development is certainly no simple matter. There are difficult questions facing academics in BiH. Decisions have to be made about exactly what sort of skills students/citizens need in the 21st century and the mix of learning outcomes that it is essential to include in the curriculum. Such decisions have to be taken in the context of existing resource levels, institutional and national priorities and the realities of what is possible in the current situation. A further consideration is that academics cannot be forced to change their traditional approaches; as such pressure is invariably counter-productive. There are also dangers to avoid, as European experience has shown; hurried and compulsory top-down reform can produce overcrowded curricula, overloaded assessment diets, trivialised objectives, and purely cosmetic changes when new learning outcomes are applied like lipstick to otherwise unchanged study programmes.

BiH academics need to be convinced about the arguments and advantages of the new Bologna-inspired methods. They will need to be supported in their introduction. BiH higher education qualifications need to be rethought in a sensitive way that conserves the best of the old with the most useful of the new. The preconditions for success include:

At the national level:

- Legislative review of the Framework Law on Higher Education and other national laws that impact on higher education, together with appropriate lower level laws to clarify responsibilities and ensure consistency with the Bologna Communiqués;
- Adoption of a co-ordinated national strategic plan for the development of BiH higher education within which the curriculum development is highlighted and the staff involved in the pilot project are used as a trained resource;
- Full implementation of the HEQF-BiH;

- Clear HEA and/or Ministry guidance on what criteria they would use to evaluate the curriculum development and approval process and its place any internal quality assurance procedures;
- Mechanisms to encourage consortium developments where discipline-based teams from across the country, including licensed private higher education institutions, could meet regularly. Existing BiH higher education institutions are hard-pressed and under resourced. National, inter-institutional subject teams should be created to work cooperatively on exchanging best practice, and ideas associated with new approaches to the curricula.

At the institutional level:

- Implementation of appropriate institutional staff development programme (for all staff: academics, support staff, administrators, etc.) that links to a properly resourced institutional teaching and learning strategy. This would require intensive staff development on writing learning outcomes at institutional level for all academic staff and those with quality assurance responsibilities;
- Recognition of staff trained in the pilot to be used as a spearhead for the introduction of the new curriculum building approaches;
- Consideration of the medium and long-term implications of the adoption of a revised curriculum on university structures, appointments, resource decisions, quality assurance processes and long-term infrastructure;

Without detailed (measurable) national and institutional academic reform, of the nature indicated above, progress toward Bologna self-certification and full implementation of the '*Standards and Guidelines for Quality Assurance in Higher Education in BiH*' is not possible. Despite obvious problems curricula reform in line with this guide should be started within institutions and faculties and even clusters of higher education institutions. Curriculum development is at the heart of the Bologna educational reforms, which have to be implemented bottom-up as well as top-down. The essence of many of the Bologna-related initiatives is to improve outdated European qualifications. Real change has to happen at the level of the higher education institutions. This is true for BiH current and future citizens who need high quality qualifications that are internationally recognised and facilitate democratic values, employability and mobility.

6.

REFERENCES AND FURTHER INFORMATION SOURCES

6. REFERENCES AND FURTHER INFORMATION SOURCES

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7.

GLOSSARY

7. GLOSSARY[25]

Accumulation
The process of collecting credits awarded for achieving the learning outcomes of educational components or other learning activities.

Allocation of Credit
The process of assigning a number of credits to qualifications/ programmes or to other educational components.

Assessment
The total range of methods (written, oral and practical tests/examinations, projects and portfolios) used to evaluate learners' achievement of expected learning outcomes.

Assessment criteria
Descriptions of what the learner is expected to do, in order to demonstrate that a learning outcome has been achieved.

Award of Credit
The act of delivering learners the number of credits that are assigned to the component or a qualification. The award of credit recognises that learners' learning outcomes have been assessed and that the learner satisfies the requirements for the educational component or the qualification.

Competences
A dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, ethical values and attitudes. Fostering competences is the object of all educational programmes. Competences are developed in all course units and assessed at different stages of a programme. Some competences are subject-area related (specific to a field of study), others are generic (common to any degree course). It is normally the case that competence development proceeds in an integrated and cyclical manner throughout a programme.

Condoning
Condoning is the term used in some national contexts when an examination board exempts a student from reassessment in a failed (or marginally failed) component if other related components are passed with sufficiently high grades.

[25] Reproduced from the ECTS Users' Guide 2009; European Communities, 2009 and the Framework for Qualifications of the European Higher Education Area

Contact Hour
Hours (typically a period of 45-60 minutes) spent by students on activities guided by teaching staff.

Credit (ECTS)
Quantified means of expressing the volume of learning based on the workload students need in order to achieve the expected outcomes of a learning process at a specified level.

Cycle
All qualifications in the European Higher Education Area are located within three cycles. One of the objectives indicated in the Bologna Declaration in 1999 was the "adoption of a system based on two main cycles, undergraduate and graduate." In 2003 doctoral studies were also included in the Bologna structure and referred to as the third cycle.

Cycle (Level) Descriptors
Generic statements of the broad expected outcomes of each of the three cycles. A good example of general cycle (level) descriptors are the so-called Dublin Descriptors, which have served as one of the foundations (along with ECTS) for the Framework for Qualifications of the European Higher Education Area.

Educational Component
A self-contained and formally structured learning experience (such as: course unit, module, seminar, work placement).

Europe/European
Europe/European refers to those countries that are signatories to the Bologna Declaration, whilst 'national' is used to describe the contexts within each of those countries or education systems.

Formal learning
Learning typically provided by an education or training institution, structured (in terms of learning objectives, learning time or learning support) and leading to certification. Formal learning is intentional from the learner's perspective.

Framework for Qualifications of the European Higher Education Area
An overarching framework that makes transparent the relationship between European national higher education frameworks of qualifications and the qualifications they contain. It is an articulation mechanism between national frameworks.

Informal learning
Learning resulting from daily life activities related to work, family or leisure. It is not structured (in terms of learning objectives, learning time or learning support) and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional (or "incidental"/random).

Learner
An individual engaged in a learning process (formal, non-formal or informal learning).

Learner-centred (approach or system)
An approach or system that supports the design of learning programmes which focus on learners' achievements, accommodate different learners' priorities and are consistent with reasonable students' workload (i.e. workload that is feasible within the duration of the learning programme). It accommodates for learners' greater involvement in the choice of content, mode, pace and place of learning.

Learning Outcomes
Statements of what a learner is expected to know, understand and be able to do after successful completion of a process of learning.

Level Descriptor
General statements of the typical achievement of learners who have been awarded a qualification at a certain level in a qualifications framework.

Levels
Represent a series of sequential steps (a developmental continuum), expressed in terms of a range of generic outcomes, against which typical qualifications can be positioned.

Module
A course unit in a system in which each course unit carries the same number of credits or a multiple thereof.

Non-formal learning
Learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). Non-formal learning is intentional from the learner's perspective.

National framework of qualifications (higher education)
The single description, at national level or level of an education system, which is internationally understood and through which all qualifications and other learning achievements in higher education may be described and related to each other in a coherent way and which defines the relationship between higher education qualifications.

Profile
Either the specific (subject) field(s) of learning of a qualification or the broader aggregation of clusters of qualifications or programmes from different fields that share a common emphasis or purpose (e.g. an applied vocational as opposed to more theoretical academic studies).

Programme (educational)
A set of educational components, based on learning outcomes that are recognised for the award of a specific qualification.

Progression
The process which enables learners to pass from one stage of a qualification to the next and to access educational programmes that prepare for qualifications at a higher level than those he/she already possesses.

Progression rules
Set of rules that define conditions for learners' progression within qualifications and towards other qualifications.

Qualification
Any degree, diploma or other certificate issued by a competent authority attesting the successful completion of a recognised programme of study.

Qualifications (higher education)
Any degree, diploma or other certificate issued by a competent authority attesting that particular learning outcomes have been achieved, normally following the successful completion of a recognised higher education programme of study.

Qualification descriptors
are generic statements of the outcomes of study. They provide clear points of reference that describe the main outcomes of a qualification often with reference to national levels.

Quality Assurance
The process or set of processes adopted nationally and institutionally to ensure the quality of educational programmes and qualifications awarded.

Recognition of credit
The process through which an institution certifies that learning outcomes achieved and assessed in another institution satisfy (some or all) requirements of a particular programme, its component or qualification.

Recognition of non-formal and informal learning
The process through which an institution certifies that the learning outcomes achieved and assessed in another context (non-formal or informal learning) satisfy (some or all) requirements of a particular programme, its component or qualification.

Reference points
Non-prescriptive indicators that support the articulation of qualifications, learning outcomes and/o other related concepts.

Student
Learner enrolled in a formal educational programme.

Transfer
The process of having credits awarded in one context recognised in another context for purposes of obtaining a qualification.

Workload
Indication of the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations) required to achieve the expected learning outcomes.

8.

ANNEX

ANNEX I

QUALIFICATION TEMPLATE
&
MODULE TEMPLATE

(A BOOKLET THAT PROVIDES ESSENTIAL INFORMATION FOR STUDENT, STAFF AND QUALITY ASSURANCE PURPOSES)

This document was elaborated in the frame of the joint project of the European Commission and the Council of Europe "Strengthening Higher Education in Bosnia and Herzegovina" (2009-2011)

The following Qualification Template is designed to provide essential information on an individual qualification. It provides a set of headings, sub-headings and a sequence for information designed to facilitate the development, presentation and validation/approval of the curriculum. The explanatory notes in italics are designed to help those responsible for their completion. In total a Qualification Template should not exceed 10-12 pages in length excluding the Module Template documents. Institutions should add any further headings which they deem appropriate.

QUALIFICATION TEMPLATE
(A booklet that provides essential information for student, staff and quality assurance purposes)

1. Introduction to the discipline

(This should consist of a brief introduction to the subject discipline - one or two paragraphs - that identifies it parameters and perhaps cutting edge issues relevant to the qualification)

2. Rationale statement

(An explanation of the unique aspects that define the particular qualification this might be one or two paragraphs that outline its most prominent features - and how it relates to employment and possibilities for further studies within the immediate local, regional and national or international context)

3. Overall qualification learning outcomes

(Insert 4-8 learning outcomes that summarise the knowledge, skills and understanding that successful graduates will obtain when they complete the qualification)

4. Structure of the qualification - include information on:

4.1 List of core (obligatory) and subject-specific option modules

(List or use a diagram to show the complete set of modules on offer and where appropriate include any module codes that indicate level)

4.2 Explanation of module relationships

(Explain the levels, pre-requisites, co-requisites and credit values of the modules within the qualification. Explain their relationship to each other. Use a diagram if this helps to explain the relationships)

4.3 Free-choice module information

(If applicable, indicate any free-choice modules these are modules from any discipline that are open for study and, for example, might include a language or cultural option for science students)

4.4 Progression routes within the qualification

(If applicable, show any alternative routes or pathways (possibilities for specialisation) through the qualification, as well as the relationships between them, together with the implications of such pathway choices)

4.5 Information on module scheduling

(Where qualifications have a number of choices within them and routes through them the scheduling of modules becomes very important as it may constrain opportunities and impact on the sequence of modules to be taken; in this case information about which modules run, when and how often they are repeated - every semester, annually or biennially)

5. University regulations

(Include any key institutional regulations that govern the pass/failure and grade of any qualification)

6. Specific qualifications regulations

(Include any specific regulations established by the course team, e.g. progression rules)

7. Admission criteria and route(s)

(Explain alternative admission routes and criteria plus any possibilities for exemptions)

8. Teaching & learning methods statement

(Explain the overall rationale and approach to teaching and learning developed for the qualification. Indicate the main different methods used and where appropriate the strategy behind them that is linked to the progression through the qualification)

9. Assessment rationale

(Describe the overall logic and range of assessments employed. Indicate how individual assessment tasks vary to match the development of the knowledge, skills and abilities associated with the qualification as students move through it)

10. Generic assessment criteria

(Identify in broad terms the generic assessment criteria, expressed in learning outcomes, that underpin the basis for assessing the quality of work associated with the qualification. These criteria are not the same as the detailed assessment-specific criteria that are appropriate for each distinct assessment task set)

11. Learning resources

(Provide a brief description of the subject specific resources available to students on the qualifications. This could also indicate the broader set of institutional resources that students can access)

12. Employability and transferable skills

(Briefly indicate the ways in which the qualification includes 'employability' and 'transferable' skills and how they are embedded within the qualifications. Indicate if these are linked to any university policy)

13. Student support

(Briefly indicate the main elements of any institutional academic, pastoral and tutoring support available to students on the qualification)

14. Linkages to external reference points

(Indicate, preferably by use of the matrix produced for the CoE/EC SHE III project, the link between individual modules and the appropriate descriptors from the HEQF-BiH - using the appropriate first or second cycle sets of descriptors)

The following Module Template is designed to provide essential information on individual modules that collectively constitute a qualification. It provides a set of headings, sub-headings and sequence for information designed to facilitate the development, presentation and validation/approval of modules that make up a qualification. The explanatory notes in italics are designed to help those responsible for their completion. Individual Module Templates should not exceed 3-4 pages in length. The section 'short module details' is just to provide brief information for reference purposes. The second section (starting 'Module aims') will contain the bulk of the module information. Explanatory notes in grey italics are included to help those responsible for their completion. Institutions should add any further headings, which they deem appropriate.

MODULE TEMPLATE
(A document that provides details of the module for student, staff and quality assurance purposes)

SHORT MODULE DETAILS:

Full Module Title:	*(Insert the full module title)*
Module Code:	*(Provide the module code or reference)*
Module Level/BiH cycle:	*(Indicate the HEQF-BiH cycle and the year the module is designed for)*
ECTS credit value:	*(Indicate the ECTS credit value assigned to the module)*
Length:	*(insert the length of the module, e.g. one semester)*
Faculty/School/Department:	*(As appropriate)*
Module leader:	*(Name of person responsible for the module)*
Contact details:	*(Email, telephone number, office availability)*
Site:	*(If applicable)*
Host Course:	*(The host qualification the module was primarily designed for)*
Module status:	*(The role of the module as an obligatory core or an option module)*
Pre-requisites:	*(Insert any specific modules that must be passed before this one)*
Access restrictions:	*(Indicate any restriction for entry, e.g. none or only BA History students)*
Assessment:	*(Indicate the key elements of assessment, e.g. 100% coursework project)*
Date validated:	*(This indicates when it will need re-validation)*
Module aims:	*(insert 3-6 aims these are the intentions of the teacher/designer)*
Learning outcomes:	*(insert 4-8 learning outcomes starting - 'On successful completion of this module the student will be able to...')*
Indicative syllabus content:	*(insert a brief description of the module content- syllabus)*

Learning delivery:	*(Explain the method of teaching/learning + study mode)*
Assessment Rationale:	*(Briefly explain the reasons for the methods used. Precise assessment criteria will need to be issued later for each assessment task set)*
Assessment Weighting:	*(indicate % weighting of each assessment component)*
Essential Reading:	*(indicative short list of key texts, web references and journals)*
Intranet web reference:	*(If applicable)*

ANNEX II

MATRIX FOR LINKING 1ST AND 2ND CYCLE QUALIFICATIONS

TO THE HEQF-BIH DESCRIPTORS

This document was elaborated in the frame of the joint project of the European Commission and the Council of Europe "Strengthening Higher Education in Bosnia and Herzegovina" (2009-2011)

MATRIX FOR LINKING 1ST CYCLE QUALIFICATIONS TO THE HEQF-BIH DESCRIPTORS

(insert individual module codes below and then complete the grid to relate them to the different HEQF-BiH higher education descriptors)										
EXTERNAL REFERENCE POINTS	**MODULE CODES**									
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the FIRST CYCLE (180-240 ECT credits)	XY01	XY02	XY03	XY04	XY05	XY06	XY07	XY08	XY09	etc
have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study										
can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study										
have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues										
can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem										
can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non-specialised audiences for given area of science										
have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources										
possess a foundation for future self-directed and lifelong learning;										
have acquired interpersonal and teamwork skills appropriate to employment and/or further study										

MATRIX FOR LINKING 2ND CYCLE QUALIFICATIONS TO THE HEQF-BIH DESCRIPTORS

(insert individual module codes below and then complete the grid to relate them to the different HEQF-BiH higher education descriptors)										
EXTERNAL REFERENCE POINTS	**MODULE CODES**									
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the SECOND CYCLE (60-120 ECTS credits)	AB01	AB02	AB03	AB04	AB05	AB06	AB07	AB08	AB09	AB10
have demonstrated a systematic understanding and mastering of knowledge in their field of study/discipline that is founded upon, and extends and/or enhances, that is typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context										
can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study										
apply conceptual thinking and abstraction with a high level of proficiency and creativity, which will enable the: - critical evaluation of current research and academic work at the forefront of the discipline - evaluation of different methodologies, development of critical opinion and the raising of alternative solutions										
have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments										
can communicate their conclusions, and the knowledge and rationale underpinning these using appropriate language(s), to specialised and non-specialised audiences clearly and unambiguously										
are able to take their own knowledge to a higher level, deepen the understanding of their field of study/discipline and continuously develop their own new skills through individual learning and self-development										
have the learning skills to allow them to continue to study in a manner that may be largely self-directed and autonomous										
have acquired interpersonal and teamwork skills appropriate to a variety of learning and employment contexts and also demonstrate leadership and/or initiative and make a contribution to change and development										

ANNEX III

THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN BOSNIA AND HERZEGOVINA

This document was elaborated in the frame of the joint project of the European Commission and the Council of Europe "Strengthening Higher Education in Bosnia and Herzegovina" (2006-2008). It was adopted by the Council of Ministers of BiH in December 2007 and published in the BiH Official Gazette 13/08.

THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN BOSNIA AND HERZEGOVINA[1]

INTRODUCTION

The Bosnia and Herzegovina (BiH) higher education system is fragmented and in need of reform. The BiH educational area requires a higher education framework that is consistent with the principles and values of the European Higher Education Area (EHEA) as developed by the Bologna process,[2] including ENQA standards and guidelines for quality assurance in EHEA. The new BiH qualifications framework is designed to strengthen higher education and act as a lever in assisting the higher education authorities and decision makers in their reform efforts aimed at reshaping the academic community, its institutions and processes. The primary function of the framework is to act as a guide and reference point for those creating new qualifications and updating existing ones within the new quality assurance system for higher education.

The new framework has been produced in the frame of a joint project of the European Commission and the Council of Europe "Strengthening Higher Education in Bosnia and Herzegovina", following widespread consultation and agreement with appropriate stakeholders including academics, students, public authorities and social partners.[3] Its successful implementation will improve public confidence in higher education. The framework is intended to help to improve the quality and recognition of qualifications and promote the reform of higher education for the benefit of all citizens.

STRUCTURE OF THE FRAMEWORK

The BiH framework for higher education qualifications consists of three cycles that reflect and expand upon the 'Dublin Descriptors'[4] adopted by Ministers of Education under the

[1] A National Framework for Higher Education Qualifications: The single description, at national level or level of an education system, which is internationally understood and through which all qualifications and other learning achievements in higher education may be described and related to each other in a coherent way and which defines the relationship between higher education qualifications. A qualifications framework is designed to ensure a consistent use of qualification titles.

[2] The Bologna Process is the most important and wide ranging reform of higher education in Europe. The ultimate aim of the Process is to establish a European Higher Education Area by 2010 in which staff and students can move with ease and have fair recognition of their qualifications. The Bologna declaration was signed by ministers of education from 29 European countries in 1999. The process was opened up to other countries, and further governmental meetings have been held in Prague (2001), Berlin (2003), Bergen (2005) and London (2007). BiH joined the process in 2003.

[3] For further information go to Joint EC/CoE project 2006-2007 "Strengthening Higher Education in BiH" at http://www.coe.ba/SHEIII.

[4] Descriptors exemplify the outcomes of the main qualification at each level, and demonstrate the nature of change between levels. They provide clear points of reference at each level, and describe outcomes that cover the great majority of existing qualifications.

Bologna Process,[5] following a decision of ministers to adopt a higher education system that is essentially based on three cycles. The Dublin Descriptors are generic (non-subject specific) statements of the typical expectations of achievements and abilities associated with qualifications that represent the end of each Bologna cycle. They are built on the following elements: knowledge and understanding, applying knowledge and understanding, generic cognitive skills, making judgements, communication skills and learning skills, learner autonomy accountability and working with others.

The BiH descriptors provide more detail than the Dublin Descriptors and are intended to be read with reference to each other. They describe the knowledge, skills and abilities associated with typical end cycle qualifications e.g. Bachelors Degree, Masters Degree, and Doctorates. These descriptors are not meant to be prescriptive or exhaustive and need to be cross-referenced with other external reference points including national and international academic or professional subject specific guidance materials e.g. Tuning project[6] materials and subject benchmark statements.

Currently, the BiH framework for higher education qualifications does not include any further levels or sub-divisions within the three cycles to illustrate progressions within the structure. However, the structure does reflect the ECTS credit ranges associated with the Bologna framework.

RELATIONSHIP OF THE FRAMEWORK WITH THE ADOPTION OF NEW APPROACHES TOWARDS QUALITY ASSURANCE, AND RECOGNITION

The new BiH qualifications framework is just one aspect of higher education reform that must be taken in conjunction with other initiatives, which collectively are designed to transform the higher educational system to make it fully consistent with the European Higher Education Area. The Council of Europe and the European Commission Joint Project 'Strengthening Higher Education in Bosnia and Herzegovina' has three elements (1) creating a higher education qualifications framework, (2) developing a work plan to introduce

[5] The 'Dublin Descriptors' were originally formulated and further developed by the Joint Quality Initiative (an informal group of higher education specialists from a variety of countries, see http://www.jointquality.org) and were adapted in Bergen as the cycle descriptors for the framework for qualifications of the European Higher Education Area. The full Bologna Working Group discussion text on 'new style' qualifications frameworks can be found at: http://www.bologna-bergen2005.no/Docs/00-Main_doc/050218_QF_EHEA.pdf.

[6] "Tuning educational structures in Europe" was a pilot project undertaken by a group of European universities, with support by the European University Association (EUA) and the European Commission from 2000 to 2004 and a growing number of partners. It addresses several of the Bologna action lines, notably the adoption and application of a system of easily readable and comparable degrees, based on two cycles and the establishment of a system of credits; by identifying points of reference for 1) generic competences, 2) subject-specific competences, 3) the role of ECTS as an accumulation system and 4) the role of learning, teaching, assessment and performance in relation to quality assurance and evaluation. For further information go to http://www.relint.deusto.es/TuningProject/index.htm, http://www.let.rug.nl/TuningProject/index.htm.

modern procedures and structures for the recognition of qualifications and, (3) establishing quality assurance standards and guidelines for higher education. These elements are connected and their simultaneous implementation is essential for any successful outcome.

Furthermore, it is recognised that successful reform will require bottom-up as well as top-down developments.

All three elements are closely linked to previous initiatives for university reform as well as the adoption of a framework law for higher education.

The objectives of the qualifications framework of the BiH Area are to:

- enable employers, schools, parents, prospective students and others to understand the achievements and attributes represented by the main qualification titles, and how qualifications relate to one another;
- assist higher education institutions (HEI), learners and others to clarify potential routes for progression and credit transfer, particularly in the context of wider participation in lifelong learning;
- create and maintain international comparability of standards, especially in intra-institutional, inter-institutional, regional and European contexts; and to facilitate mobility for all (students, academic and non-academic staff, citizens);
- eradicate inconsistency and confusion between higher education qualifications by a clear description of qualifications in terms of cycle/level, learning outcomes and credit;
- help create domestic and international confidence in BiH higher education qualifications and standards by integrating them with the new BiH quality assurance system fully consistent with the European Higher Education Area (EHEA) European Association for Quality Assurance in Higher Education (ENQA) 'standards and guidelines';[7]
- improve the recognition of BiH qualifications and the employability of citizens by ensuring their relevance to the needs of the national and international labour market;
- ensure that access to, and the content of, BiH higher education is based upon the principles and values of democratic society.

Qualifications that signify the successful completion of the first cycle (180-240 ECTS credits) are awarded to students who:

- have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication

[7] The full ENQA '*Standards and Guidelines*' for Quality Assurance in the European Higher Education Area can be found at: http://www.enqa.eu/files/BergenReport210205.pdf.

technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study;

- can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;
- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;
- can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem;
- can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non- specialised audiences for given area of science;
- have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources;
- possess a foundation for future self-directed and lifelong learning;
- have acquired interpersonal and teamwork skills appropriate to employment and/or further study.

Qualifications that signify the successful completion of the second cycle (60-120 ECTS credits) are awarded to students who:

- have demonstrated a systematic understanding and mastering of knowledge in their field of study/discipline that is founded upon, and extends and/or enhances, that is typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;
- can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- apply conceptual thinking and abstraction with a high level of proficiency and creativity, which will enable the:
  - critical evaluation of current research and academic work at the forefront of the discipline
  - evaluation of different methodologies, development of critical opinion and the raising of alternative solutions
- have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;

- can communicate their conclusions, and the knowledge and rationale underpinning these using appropriate language(s), to specialised and non-specialised audiences clearly and unambiguously;
- are able to take their own knowledge to a higher level, deepen the understanding of their field of study/discipline and continuously develop their own new skills through individual learning and self-development;
- have the learning skills to allow them to continue to study in a manner that may be largely self-directed and autonomous;
- have acquired interpersonal and teamwork skills appropriate to a variety of learning and employment contexts and also demonstrate leadership and/or initiative and make a contribution to change and development.

Qualifications that signify the successful completion of the third cycle are awarded to students who:

(The following are the 'Dublin' third cycle descriptors that need to be discussed and expanded upon. They may well be altered following the current Bologna work in this area.)

- have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;
- have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;
- have made a scientific contribution through original research that extends the frontier of knowledge;
- are capable of critical analysis, evaluation and synthesis of new and complex ideas;
- can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise ;
- shall be expected to be able to promote, within academic and professional contexts, advancement in a knowledge based society.

ANNEX IV

PILOT PROJECT DESCRIPTION
FOR THE APPLICATION OF
THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN BIH

The Framework for Higher Education Qualifications in BiH

PILOT PROJECT DESCRIPTION

(Revised and expanded version following the launch Qualifications Framework Workshop. 16-17th June 2007)

The application of the BiH framework to curriculum development

INTRODUCTION

This stage of the SHE project focuses on the practical application of the framework for higher education qualifications in BiH (BiH HE-QF) to curriculum development. It moves from the construction of a theoretical tool (the BiH framework for HE qualifications) to its practical use in the process of developing new qualifications and reviewing existing ones.

The BiH HE-QF acts as an external reference point or generic standard that aids the curriculum developer. It is not designed to be a straitjacket or eternal fixed set of points to be repeated in all courses. It is best regarded as a common and useful set of guidance and good practice discussion items that support academics. Many other reference points also need to be taken into consideration when developing new curricula including sectoral reference points (benchmark statements), experience and feedback on previous study programmes.

This project seeks to apply the BiH HE-QF to the concrete process of curriculum development and to assess the use and benefits in this application and make suitable recommendations for its further development.

The following explains how the pilots are conceived and the role they should play in supporting the strengthening of higher education in BiH. It should be read in conjunction with the 10-steps ahead 'action plan' produced and agreed at the *Higher Education Qualifications Framework Workshop* held 16-17 June 2009.

THE PILOTS

There will be three pilots designed to include higher education staff from all BiH higher education institutions (HEI). The pilots will cover first and second cycle qualifications that are offered at each of the 8 public universities in BiH, possibly including an appropriate science qualification, business studies, and interdisciplinary humanities programme (joint degree).

Each of the three pilots will be conducted by a working group. For each of the three pilots each university will nominate 2 senior staff members such as a Dean/Associate Dean, a suitable reform 'champion' committed to curriculum reform in the appropriate subject discipline and/or staff responsible for internal quality assurance. It is essential that staff involved in these pilots is given appropriate support by their institutions to participate fully in all meetings.

It is expected that all public BiH universities suggest several subjects and specific qualifications for inclusion in the project to the CoE **by 10 July 2009**, and nominate two subject experts for each of the suggested pilots. The universities' suggestions should include a formal statement of staff and institutional commitment.

This would mean that each subject pilot would consist of approximately 16 academics and possibly further academics from appropriate private institutions and student representatives. Further observers, representing ministries, industry or other official bodies, may be able to attend meetings but the size of each pilot discipline group must remain manageable.

The first *Higher Education Qualifications Framework Workshop* held on the 16-17 June suggested that every BiH institution would be consulted before a final decision on disciplines and specific qualifications was made. However, the final decision will have to be entrusted to the Council of Europe since it depends on the availability of international subject experts for each pilot.

SCHEDULE OF ACTIVITIES:

The pilots will run over the next 12 months of the project.
The detailed schedule of meetings and work plan was decided at the meeting on the 16-17 June and is as follows:

- 16-17 June first QF workshop meeting;
- by 30 June a revised pilot project description to be available;
- by 10 July BiH HEI to have nominated subjects and specific qualifications for inclusion in the project and subject experts;
- late September first plenary meeting of the three pilot groups with CoE experts the chairs/co-chairs and rapporteurs of each group will be agreed at this meeting and start the initial concrete work;
- October-November individual subject pilot groups meet independently (minimum of two meetings);
- late November second plenary meeting of the three pilot groups with CoE experts;
- December-February individual subject pilots meet independently (minimum of two meetings);
- early March third plenary meeting of the three pilot groups with CoE subject experts;
- March-May individual subject pilots meet independently (as required);
- June final meeting with CoE experts project conclusions and recommendations finalised.

It is envisaged that the two Council of Europe external experts (and possibly further international experts, depending on the chosen subject areas) would attend at least four meetings whilst the bulk of the development work would be accomplished by the BiH subject pilot groups working alone but with the remote support of the experts (providing email advice, feedback/comment and examples of current European best practice in curriculum development).

PURPOSES OF THE PILOTS:

The purpose of the pilots is to:

- demonstrate and test the use and benefits of the BiH qualifications frameworks (and associated level and level descriptors) in curriculum development;
- illustrate the linkage between curriculum development, the BiH QF, academic recognition and Quality Assurance (internal and external) and the application of the E4 *Standards and Guidelines* adopted by the Bologna Ministers. This element will directly relate the quality assurance dimensions of monitoring, review and validation of qualifications within institutions to the actual process of curriculum development;
- introduce BiH staff to cutting-edge examples of good practice in curriculum development including design, decision on profile, expression of learning outcomes, estimation of workload, modes of delivery and varieties of assessment methods;
- produce for three different qualifications a core curriculum of modules that might equate to 40-70% of a complete qualification that has been developed and agreed by all participating institutions. The remaining part of the curriculum would reflect each institution's profile mission, specialist skills, research interests and staff capabilities. It is not the intention of the project to produce one new identical qualification for delivery by all institutions as this would stifle diversity and reduce choice and competition in higher education which are antithetical to the Bologna process and institutional autonomy;
- explore, within the curriculum teams, issues associated with ECTS credit allocation, writing appropriate learning outcomes (including suitable employability outcomes), student centred learning, etc.
- produce a handbook of the curriculum development process designed to aid future BiH institutional curriculum development teams in other subject disciplines.

It is not necessarily expected that those attending the pilot workshops will emerge with a finalised new qualification (see point 4 above) but it is hoped that each institution will go on to do this. However, they will have explored the process of curriculum development and have acquired the tools to undertake such work with their colleague back in their institutions.

EXPECTED RESULTS OF THE PROJECT:

On the successful completion of pilots BiH staff would be able to:

- write suitable complex learning outcomes for their disciplines at the level of the module/unit and qualification;
- appropriately relate these learning outcomes to new delivery methods and assessment;
- comprehensively redesign an existing qualification and/or create 40-70% of a new (first or second cycle) qualification in their subject discipline based on learning

outcomes and fully consistent with Bologna agreements and ready for an internal validation/approval process consistent with the E4 '*Standards and Guidelines*' - internal quality assurance processes;

- produce innovative qualifications and modules that are student/learner-centred, suitably employment related and enhance the possibility of student, staff and programme mobility;
- train colleagues and run workshops at their own institutions in the above.

COUNCIL OF EUROPE SUPPORT

The role of the Council of Europe experts is throughout the project to facilitate discussion, provide suitable advice and support materials. Once the pilots have been established it is anticipated that much of the work, between visits by the experts, will be done by the subject discipline group independently working and holding meetings.

Stephen Adam and Volker Gehmlich, 26 June 2009

ANNEX V

MEMBERS OF THE WORKING GROUPS ACTIVELY INVOLVED IN THE EXERCISE OF PILOTING THE FRAMEWORK FOR HIGHER EDUCATION QUALIFICATIONS IN BIH

MEMBERS OF THE WORKING GROUPS

The below listed representatives of BiH universities were actively involved in the exercise OF piloting the framework for higher education qualifications in BiH and the elaboration of the tools presented in this publication and its annexes. The joint EC/CoE project owes its gratitude to their professional engagement, and personal dedication, as much as to the expertise and guidance that were provided by the CoE experts Stephen Adam and Volker Gehmlich.

Mechanical Engineering/Manufacturing

Indira Buljubašić, University in Tuzla, Mechanical Faculty
Malik Čabaravdić, University in Zenica, Mechanical Faculty
Edin Cerjaković, University in Tuzla, Mechanical Faculty
Majda Čohodar, University in Sarajevo, Mechanical Faculty
Petar Gvero, University in Banja Luka, Mechanical Faculty
Damir Hodžić, University in Bihać, Technical Faculty
Nusret Imamović, University in Zenica, Mechanical Faculty
Isak Karabegović, University in Bihać, Technical Faculty
Muhamed Hadžiabdić, International University Sarajevo, Faculty of Engineering and Natural Sciences
Snježana Rezić, University in Mostar, Mechanical engineering and IT Faculty
Miroslav Rogić, University in Banja Luka, Mechanical Faculty
Almira Softić, University in Sarajevo, Mechanical Faculty
Dragi Tiro, University Džemal Bijedić Mostar, Mechanical Faculty
Adisa Vučina, University in Mostar, Mechanical engineering and IT Faculty

Economics/Marketing

Vaso Arsenović, Slobomir P University, Faculty of Economics and Management
Azra Bajramović, University Džemal Bijedić Mostar, Faculty of Economy
Cariša Bešić, University in Bihać, Faculty of Economy
Sanja Bijakišić, University in Mostar, Faculty of Economy
Sabina Đonlagić, University in Tuzla, Faculty of Economy
Shadi Fadda, International University Sarajevo, Faculty of Economics and Business Administration
Bernard Harbaš, University in Zenica, Faculty of Economy
Zdenko Klepić, University in Mostar, Faculty of Economy
Mirela Kljajić-Dervić, University in Bihać, Faculty of Economy,
Safet Kozarević, University in Tuzla, Faculty of Economy
Muttalip Kutluk Ozguven, International University Sarajevo, Faculty of Economics and Business
Jasmina Osmanković, University in Sarajevo, Faculty of Economy
Jelena Poljašević, Slobomir P University, Faculty of Economics and Management
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PARTICIPANTS AND OBSERVERS IN PLENARY MEETINGS

The below listed representatives of BiH ministries and agencies actively participated in the plenary meetings in the process of piloting the framework for higher education qualifications in BiH. The joint EC/CoE project is grateful for their attentive follow up, advice and assistance to carry out this exercise with due relevance to the broader context of higher education reform in BiH.

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ANNEX VI

CASE STUDY 1
ENGINEERING WORKING GROUP

EXAMPLE CURRICULUM
BSC MECHANICAL ENGINEERING

This document was developed by a team of subject experts in the course of a joint exercise of 9 BiH universities under the joint EC/CoE project "Strengthening Higher Education in BiH" (2009-2011).

Due to time and resource restrictions it was not possible to produce a full set of modules that encompasses complete qualifications.

It is an illustrative example, demonstrates approaches and solutions for defining learning outcomes, including transferable skills, the employability agenda, student-centred learning, varied assessments, etc. and is designed as a resource for those responsible for staff development and academics in curriculum development teams.

QUALIFICATION HANDBOOK
Mechanical Engineering/Manufacturing B.Sc.

Faculty name	
Name of the programme	Mechanical Engineering/Manufacturing Programme
Academic degree	Bachelor of Science (B.Sc.)
Study cycle	1st cycle FQ-EHEA and 1st FQHE-BiH
Language of study	Official Languages in Bosnia and Herzegovina
Estimated length of the study	3 years
Programme leader/head of department	
Contact information	
Web	

1 Introduction to the Discipline and Qualification

Engineers are characterised by their ability to use new technology creatively and innovatively. They maintain, manage and undertake projects in design, development, manufacture, construction and operation. They find solution to problems.

Mechanical engineering is the use of basic science in the design and manufacture of components and systems. This requires the application of physical and mechanical principles in the development of machines, energy conversion systems, materials, and equipment for measurement and control. The creation, design, and improvement of products, processes, and systems that are mechanical in nature are the core of many industries. Solutions to such major problems as environmental pollution, lack of mass transportation, and need for new sources of energy will depend heavily on the ability to create new types of machines and mechanical systems. And full use of developments in emerging fields, such as nanotechnology and bio-engineering, require mechanical systems. These needs have created a substantial demand for mechanical engineers in a broad range of fields. Knowledge of mathematics, physics, and chemistry lies at the core of this field. Application of this knowledge uses engineering technology - a disciplined way of thinking, modelling, and testing that enables development of new systems despite incomplete information and uncertainty.

Mechanical engineering manufacturing program focuses on teaches students to master the basic knowledge on the principles of mechanics, materials and energy. In addition, they get the knowledge of the transformation of metal, polymer or bio-compatible material into the desired shape and the subsequent assembly of finished products in a complex whole, where it is possible to incorporate much of their own knowledge in to the final product. This

undoubtedly represents a major challenge in manufacturing as a key branch of human activity. Important role in all aspects of the above mentioned has study on automation and management of production systems, which aims to enable students to design, analyse, simulate and optimize production processes in order to maintain the competitiveness of the considered production system. In addition, an additional area of study is the integration of different tools or moulds and machining technologies in the cutting, forging, casting, etc., to ensure functional and competitive production processes and quality assurance as the desired property of the final product. Students of the manufacturing engineering acquire skills during their studies such as programming, using computers to design machines, testing of materials, team work, a way of life-long learning, etc.

2 Rationale Statement

The economy of Bosnia and Herzegovina has been experiencing growth in the last few years, and metal processing industry is one of the most promising sectors. As an element of the development of Bosnia and Herzegovina, it is necessary to support this trend in all areas. A key factor of development is human resources who possess specialized knowledge that would establish the competitiveness of BiH economy, or to give responses under the demands of global markets. On the other hand, the state of science is a dynamic process that is constantly changing, so that the desired personnel is reached under permanent adjustment of higher education to meet these requirements. For this reason, curriculum has been innovated of Mechanical Engineers profile of production engineering, while their competencies will be explained hereafter. The Mechanical Engineering program provides students with a well rounded engineering education. During theirs studies students will be able to acquire knowledge and skills in industry in Bosnia and Herzegovina through the inter-ship programs. Graduates will be well prepared for exciting careers in various industries, such as metal processing industry, energy sector, food industry etc. Students have easy access to the professors for help and mentoring, well developed infrastructure, laboratories, sporting and cultural events.

3 Overall Qualification Learning Outcomes

After successful completion of the programme a student will be able to:

- identify, formulate and solve mechanical engineering problems by using appropriate theory and practical skills
- design a manufacturing system, component or process to meet desired needs
- use different Numerical Control (NC) part-programs for manufacturing
- evaluate environment constraints and safety issues in engineering
- recognize the fact that solutions may sometimes require non-engineering considerations such as economy and impact on society
- recognize a need to engage in a life-long learning
- apply professional and ethical responsibility
- communicate effectively, both in native and English language (level B1), with a written, oral and visual means in a technical manner

4 Structure of the Qualification

The qualification program consists of the three groups of modules, namely Generic Modules, Generic Engineering Modules and Program Specific Modules. Further, modules can be core (required) or option modules.

Generic Core Modules are designed to give the students good foundation in basic disciplines such as Mathematics, Physics and Chemistry as well as to address some ethical issues (ME104) and to develop important transferable and communication skills (ME215 and ME102, ME205, ME215). The modules from this group are offered in the first and second year of studies.

The Generic Engineering Core Modules consist of modules which cover typical engineering topics. The modules aim to give strong background in basic engineering disciplines to the students. These modules are offered in all three years of studies.

The Program Specific Core Modules are the modules specifically designed to define the qualification and to give the identity to the qualification. These modules aim to give necessary practical and specialist skills to the students. The emphasis in these modules is on team work, ability to work independently, practical skills etc. They are mainly offered in the last year of studies.

The general and program specific option modules are included in curricula to provide opportunity to each student to explore area of interests that are not included in core curricula.

4.1 List of core (obligatory) and option modules

List of Generic Core Modules	List of Generic Engineering Core Modules:	List of Programme Specific Core Modules:	List of Generic and Programme Specific Option Modules:
1. ME101 Mathematics I 2. ME102 Physics 3. ME104 Introduction to the Science and Technology 4. ME106 Materials I 5. ME107 Mathematics II 6. ME110 Materials II 7. ME111 Introduction to Programming 8. ME102 English I ME205 English II	1. ME103 Statics 2. ME105 Technical documentation 3. ME108 Kinematics 4. ME109 CAD 5. ME201 Dynamics and vibrations 6. ME202 Strength of materials 7. ME203 Mechanical elements I 8. ME204 Fluid Mechanics 9. ME207 Mechanical elements II 10. ME208 Thermodynamics 11. ME209 Electrical engineering 12. ME301 Measurements 13. ME302 Introduction to automatic control	1. ME210 Cutting technology 2. ME304 Numerical methods 3. ME307 Welding and heat treatment 4. ME308 CAM system 5. ME309 Technological processes 6. ME313 Unconventional Technology 7. ME311 Bachelor Thesis	1. ME213 Modern Materials 2. ME304 Terotechnology 3. ME215 Economics and Management 4. ME216 Chemistry 5. ME313 Unconventional Technology 6. ME314 Robotics 7. ME315 Introduction to engineering design 8. ME316 Industrial engineering 9. ME317 Quality management 10. ME318 Product development 11. ME319 Industrial ecology 12. ME320 Logistic 13. ME321 Advanced manufacturing technology 14. ME322 Head transfer 15. ME323 Solid modelling 16. ME324 Hydraulics and pneumatics 17. ME325 Technical diagnostic

4.2 Explanation of module relationships

Modules pre-requisites are given in table 4.5.

4.3 Free choice module information

(not specified)

4.4 Progression routes within the qualification

(not specified)

4.5 Information on module scheduling

Semester I

Module code	Module name	ECTS	Pre-requsites
ME101	Mathematics I	5	
ME102	Physics *(see module description)*	5	
ME103	Statics	5	
ME104	Introduction to the Science and Technology	5	
ME105	Technical documentation	5	
ME106	Materials I *(see module description)*	5	
	TOTAL	30	

Semester II

Module code	Module name	ECTS	Pre-requsites
ME107	Mathematics II	5	ME101
ME108	Kinematics	5	ME102, ME101
ME109	CAD	5	
ME110	Materials II *(see module description)*	5	ME106
ME111	Introduction to Programming	5	
ME112	English I	5	
	TOTAL	30	

Semester III

Module code	Module name	ECTS	Pre-requsites
ME201	Dynamics and vibrations	5	ME108
ME202	Strenght of materialsI	5	
ME203	Mechanical elements I	5	
ME204	Fluid Mechanics	5	ME108, ME107
ME205	English II	5	ME112
	General Option Module *	5	
	TOTAL	30	

Semester IV

Module code	Module name	ECTS	Pre-requsites
ME207	Mechanical elements II	5	ME203
ME208	Thermodynamics	5	ME107
ME209	Electrical engineering	5	
ME210	Cutting technology	5	
	Programme option module *(see module description ME213)*	5	
ME212	Intern-ship	5	
	TOTAL	30	

Semester V

Module code	Module name	ECTS	Pre-requsites
ME301	Measurements *(see module description)*	5	
ME302	Introduction to automatic control	5	
ME303	Plasticity technology	5	
ME214	Numerical methods	5	
	Programme option module	5	
	Programme option module	5	
	TOTAL	30	

Semester IV

Module code	Module name	ECTS	Pre-requsites
ME307	Welding and heat treatment	5	
ME308	CAM system *(see module description)*	5	
ME309	Technological processes	5	
	Programme option module	5	
ME311	Bachelor Thesis	5	
	Programme option module *(see module description ME317)*	5	
	UKUPNO	30	

5 University regulations

not applicable

6 Specific qualifications regulations

not applicable

7 Admission criteria and route(s)

not applicable

8 Teaching & learning methods statement

The teaching and learning methods are designed to encourage students to work both independently and as a member of team. Also, the methods are such that students gain knowledge about the importance of lifelong learning. The methods include:

For generic modules:
- lectures
- laboratory exercises

For generic engineering modules:
- lectures,
- laboratory exercises,
- exercises (case studies),
- team work

For program specific modules:
- lectures,
- seminar works,
- projects,
- workshops,
- presentation of student's papers

9 Assessment rationale

Assessment methods are designed to match intended learning outcomes. A variety of assessments techniques will be employed such as:
- midterm exams
- final exams
- written essays
- oral presentations
- problem-solving exercises
- case studies
- laboratory work
- project work

Students will be assessed on the basis of their abilities to research information, analyse issues and conflicting ideas, and present their arguments in a coherent form. In-module assessment is based on topics covered in seminars, lectures, tutorials and workshops and requires the demonstration of a range of subject-specific and general skills.

10 Generic assessment criteria

These assessment criteria are generic and apply to all subject areas at the relevant level across the University. Each department supplements these with its own subject-specific

criteria in line with the appropriate subject benchmarks and other requirements relevant to the discipline.

Grades			Description
A	10	5	The work examined is exemplary and provides clear evidence of a complete grasp of the knowledge, understanding and skills appropriate to the Level of the qualification. There is also evidence showing that all the learning outcomes and responsibilities appropriate to that Level are satisfied at a high level.
B	9	4	The work examined is excellent and is evidence of comprehensive knowledge, understanding and skills appropriate to the Level of the qualification. There is also evidence showing that all the learning outcomes and responsibilities appropriate to that Level are satisfied and many satisfied at a high level.
C	8	3	The work examined is good and is evidence of the knowledge, understanding and skills appropriate to the Level of the qualification. There is also evidence showing that all the learning outcomes and responsibilities appropriate to that Level are satisfied and many are more than satisfied.
D	7	2	The work examined is acceptable and provides evidence of the knowledge, understanding and skills appropriate to the Level of the qualification. There is also evidence that all the learning outcomes and responsibilities appropriate to that Level are satisfied.
E	6	1	The work examined is acceptable and provides evidence of the minimum knowledge, understanding and skills appropriate to the Level of the qualification. There is also evidence that majority of the learning outcomes and responsibilities appropriate to that Level are satisfied.
F	5	0	The work examined is unacceptable and provides little evidence of the knowledge, understanding and/or skills appropriate to the Level of the qualification. The evidence shows that few, if any, of the learning outcomes and responsibilities appropriate to that Level are satisfied.

11 Learning resources

Not applicable

12 Employability and transferable skills

Excellent career opportunities for mechanical engineers exist in aerospace, biomedical, computer, electronics, energy, environmental, manufacturing and fabrication, machine and tool design, transportation, and a host of other industries. It is therefore not surprising that mechanical engineers enjoy one of the best employability records in today's Bosnia and Herzegovina.

The mechanical engineering program is designed to impart students a number of important transferable skills such as:

- problem solving
- organising
- communicating effectively
- working to deadlines
- management and leadership
- making decisions
- research skills

13 Student support

Not applicable

14 Linkages to external reference points

Matrix linking first cycle mechanical Engineering / manufacturing program to FQ-BiH DESCRIPTORS

EXTERNAL REFERENCE POINTS	MODULE CODES																								
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the FIRST CYCLE (180-240 ECT credits)	ME101	ME102	ME103	ME104	ME105	ME106	ME107	ME108	ME109	ME110	ME111	ME112	ME201	ME202	ME203	ME204	ME205	ME206	ME207	ME208	ME209	ME210	ME211	ME212	ME213
have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study	X	X	X	X		X	X	X		X	X	X					X			X	X				
can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study									X		X		X	X	X	X			X	X		X			X
have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues				X																					
can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem						X			X	X			X	X	X	X			X	X	X	X			X
can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non-specialised audiences for given area of science				X	X							X					X								
have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources																						X			
possess a foundation for future self-directed and lifelong learning;												X					X				X				
have acquired interpersonal and teamwork skills appropriate to employment and/or further study																									

EXTERNAL REFERENCE POINTS	MODULE CODES																												
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the FIRST CYCLE (180-240 ECT credits)	ME214	ME215	ME216	ME301	ME302	ME303	ME304	ME305	ME306	ME307	ME308	ME309	ME310	ME311	ME312	ME313	ME314	ME315	ME316	ME317	ME318	ME319	ME320	ME321	ME322	ME323	ME324	ME325
have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study		X	X																									
can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study	X	X	X		X	X	X				X	X		X	X	X	X	X	X	X	X	X	X	X				X
have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues		X		X										X		X	X	X	X	X	X	X	X	X				
can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem	X	X	X	X	X	X	X			X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non-specialised audiences for given area of science		X										X		X	X	X		X	X	X	X	X	X	X				X
have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources		X								X				X		X	X	X	X	X	X	X	X	X	X	X	X	X
possess a foundation for future self-directed and lifelong learning;		X		X			X					X		X		X	X		X	X	X	X	X	X			X	X
have acquired interpersonal and teamwork skills appropriate to employment and/or further study		X		X								X		X			X	X		X	X	X	X	X				X

MODULE DESCRIPTION
Physics

Full Module Title:	Physics
Short Module Title:	n.s.
Module Code:	ME 102
Module Level/BiH cycle:	First Cycle BiH QF and FQ-EHEA
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	core module
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	none
Assessment:	n.s.
Date validated	07/16/10

Module aims:

- To provide education in physics of the high quality at the undergraduate level
- To give good foundation in physics for engineering students and prepare them for higher level engineering courses
- to provide students with a strong basic grounding in practical laboratory work from which they will be able to progress to the more sophisticated practical work of the later years of the degree programme

Learning outcomes:

After finishing the course successfully, the student will be able to

- Solve basic problems from mechanics and thermo-dynamics.
- Recognize underlying physical laws in given problems.
- Apply physical principles to solving problems.
- Demonstrate analytical and problem solving skills at the intermediate/ advanced undergraduate level.
- Explain the science underlying familiar facts, observations, and phenomena.
- Explain physical phenomena by combining micro (molecular level) and macro (system level) physics.

MODULE DESCRIPTION
Physics

Indicative syllabus content:

A calculus-based study of the basic concepts of physics. Topics include kinematics, dynamics of single particle system, Newton's Laws, gravitation, energy, momentum, conservation laws, circular and rigid body motion, oscillations, fluid mechanics, thermal equilibrium, temperature, the laws of thermodynamics with applications to ideal gases and thermodynamic processes.

Learning delivery:

The teaching and learning methods should encourage students to work both independently and as a member of team. Also, the methods are such that students gain knowledge about the importance of lifelong learning. The methods include:

- lectures,
- case studies. The students have to make seminar works where they solve practical problems by using physical laws. Typically, the problems are related to everyday life phenomena. They work in teams.
- laboratory exercises - measurements of different physical quantities, demonstration of physical laws, ...
- tutorials - solving analytically physical problems.

Assessment Rationale:

Assessment concept is based on continuous work with students during semester. Evaluation method is based on giving points for each activity and examination during semester as well as on final exam.

Assessment Criteria:

The criteria upon which the marks will be allocated are as follows:

Participation in class - weighting 10%
- The presence 5%
- The participation in class 5%

Two in-term exams (It is periodical checks of knowledge - theory) - weighting 50%
- The 1st in-term exam 25%
- The 2nd in-term exam 25%

Seminar work (case study) - weighting 5%

Labaratory work - weighting 10%

Final exam 25%

Essential Reading:

- Physics for Scientists and Engineers: A Strategic Approach by Randall D. Knight, Addison Wesley; 2 edition (October 19, 2007)
- Masteringphysics web based application
- Student Workbook Physics for Scientists and Engineers: A Strategic Approach with Modern Physics with mastering physics, 1/e

MODULE DESCRIPTION
Physics

Additional readings:
- Physics: Principles with Applications (6th edition) by Douglas C. Giancoli, Pearson, 2005.
- Conceptual Physics, Paul G. Hewitt, Addison Wesley; 10th edition (July 10, 2005)

Intranet web reference: n.s.
Validation date: 08.10.2010

MODULE DESCRIPTION
Materials I

Full Module Title:	Materials I
Short Module Title:	n.s.
Module Code:	ME 106
Module Level/BiH cycle:	First cycle BiH QF and FQ-EHEA; 1st year module
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	core module
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	none
Assessment:	n.s.
Date validated:	n.s.

Module aims:

- To introduce students with the basic terms in material science
- Learn about international and national standards on material
- To explore the characteristics of different materials
- Recognize a need to engage in a life-long learning.

Learning outcomes:

Upon successful completion of this course, a student will be able to...

- Define and describe different materials and their specifics;
- Interpret different state diagrams;
- Choose materials in accordance with defined requests;
- Analyse changes in alloys' structures when exposed to thermal changes;
- Categorize materials in accordance with their specifics;

Indicative syllabus content:

- Introductory course about function, significance and choice of materials for constructions;
- Atomic and crystal structure of metals;
- Alloys and their crystal structure;
- State diagrams, two and three-component systems;
- Elastic and plastic deformation of crystal bodies;
- Metallurgy of metals and alloys, iron and steel;

MODULE DESCRIPTION
Materials I

- Balance state diagram Fe-Fe3C and Fe-C;
- Dissolution diagram of austenite, IR and KH diagrams;
- Thermal and thermo-chemical processing of steel;
- Cast iron;
- Nonferrous materials: Al, Ti, Cu, Mg

Learning delivery: Lectures are realizing with multimedia, with techniques of active learning and with active participation of students. Laboratory exercises are held in laboratory for material science;

Assessment Rationale: Assessment concept is based on continuous work with students during semester. Evaluation methods include: assessment of performed laboratory exercise, assessment of both individual and group work on given topics (use of literature, written reports for the given theme and oral presentation). Each activity is evaluated and awarded with certain points. The reason for using several methods of evaluation is to give an opportunity to students to fully express their knowledge in the best way they can (some in written, form, some in verbal and some in practical.

Assessment Criteria: The criteria upon which the marks will be allocated are as follows:

- Participation in class - weighting 5%
- Two in-term exams (It is periodical checks of knowledge - theory) - weighting 40%
  - The 1st in-term exam 20%
  - The 2nd in-term exam 20%
- Seminar work (case study) - weighting 5%
- Labaratory work - weighting 15%
- Final exam 35%

Essential Reading:

- Blagojević ,Ismailović, Pašić: " Materijali u mašinstvu" Glas Banja Luka (1987)
- Manojlović: "Mašinski materijali" Mašinski fakultet Beograd (1980)
- Dž. Kudumović, Zavarivanje i termička obrada FEM, Tuzla 1998 god.
- Dž. Kudumović;Materijali I,Mašinski fakultet Tuzla, 2009.
- "Journal of Engineering Materials and Technology", Washington state University, ISSN: 0094-4289.
- Journal - „Mathematics and Mechanics of Solids", University of California.

Intranet web reference: n.s.
Validation date: n.s.

MODULE DESCRIPTION
Materials II

Full Module Title:	Materials II
Short Module Title:	n.s.
Module Code:	ME 110
Module Level/BiH cycle:	First cycle BiH QF and FQ-EHEA; 2nd year module
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	core module
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	none
Assessment:	n.s.
Date validated:	07/16/10

Module aims:

- to give students an understanding of the basics of materials and their application to everyday life and technology
- to develop an appreciation of science on materials;
- to provide a general education in science on materials for all students;
- to develop the ability to observe, to think logically, and to communicate effectively
- to develop an understanding of the scientific method.

Learning outcomes:

Upon successful completion of this course, a student will be able to:

- Define and describe different methodologies for load tests;
- Differentiate between different non-destructive methods of material tests;
- Choose and demonstrate different methods of materials' tests;
- Operate as a part of a team when working on a project assignment;
- Outline advantages and disadvantages of different test methods and choose appropriate tests for different contexts;

MODULE DESCRIPTION
Materials II

- Identify and formulate problems and propose appropriate solutions related to specific types of load;
- Identify and operate with hazardous materials or in hazardous situations.

Indicative syllabus content:

- Introductory lectures on function, significance and methodologies for test of loading;
- Testing of mechanical properties of materials under different types of load;
- Tensile strength tests, Hook's diagram;
- Strength of shear, bending and twisting;
- Tests of materials' hardness;
- Tests of toughness;
- Fatigue of material;
- Dynamic strength;
- Wőhler's curve;
- Smith's diagram;
- Tests with long-term static load;
- Measurements of deformations and stress-tensiometry;
- Tests with non-destructive methods- ultrasound, radiography, penetrants, magnetic flux;
- Corrosion and wear and tear of materials;

Learning delivery: Lectures are realizing with multimedia, with techniques of active learning and with active participation of students. Laboratory exercises are held in laboratory for material science. Students' visits to different manufacturing plants are organized twice during a semester.

Assessment Rationale: Assessment concept is based on continuous work with students during semester. Evaluation methods include: assessment of performed laboratory exercise, assessment of both individual and group work on given topics (use of literature, written reports for the given theme and oral presentation). Each activity is evaluated and awarded with certain points. The reason for using several methods of evaluation is to give an opportunity to students to fully express their knowledge in the best way they can (some in written, form, some in verbal and some in practical.

Assessment Criteria: The criteria upon which the marks will be allocated are as follows:

Participation in class - weighting 5%

Two in-term exams (It is periodical checks of knowledge - theory) weighting 40%

- The 1st in-term exam 20%

MODULE DESCRIPTION
Materials II

- The 2nd in-term exam 20%

Seminar work (case study) - weighting 5%
Labaratory work - weighting 15%
Final exam 35%

Essential Reading:

- Blagojević ,Ismailović, Pašić: " Materijali u mašinstvu" Glas Banja Luka (1987)
- Manojlović: "Mašinski materijali" Mašinski fakultet Beograd (1980)
- Dž. Kudumović, Zavarivanje i termička obrada FEM, Tuzla 1998 god.
- Dž. Kudumović;Materijali I,Mašinski fakultet Tuzla, 2009.
- "Journal of Engineering Materials and Technology", Washington State University, ISSN: 0094-4289.
- Journal - „Mathematics and Mechanics of Solids", University of California.

Intranet web reference: n.s.
Validation date: 07/16/10

MODULE DESCRIPTION
Modern Materials

Full Module Title:	Modern Materials
Short Module Title:	n.s.
Module Code:	ME213
Module Level/BiH cycle:	First cycle BiH QF and FQ-EHEA; 3rd year module
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	election module
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	none
Assessment:	n.s.
Date validated:	07/16/10

Module aims:

- to give students an understanding of the modern materials and their application to everyday life and technology
- to develop an appreciation of science on materials;
- to develop the ability to observe, to think logically, and to communicate effectively
- to develop an understanding of the scientific method.

Learning outcomes:

After finishing the course successfully, the student will be able to:

- Define and describe different modern materials and their specifics;
- Interpret differences between modern and classic materials in engineering;
- Choose appropriate materials in accordance with defined engineering problems;
- Evaluate advantages of modern material's application in engineering structures;
- Categorize materials in accordance with their applications

Indicative syllabus content:

- Ceramic materials;
- Polymer materials;
- Composite materials;
- Metal foams;

MODULE DESCRIPTION
Modern Materials

- Materials and parts resulted by powder metallurgy;
- Metal glasses (amorphous metals);
- Smart materials;
- Light metals;
- Copper alloys;
- Special steels;
- Alloys of steels and other metals;
- Nickel and its alloys;
- Lead, Zinc and their alloys;
- Special alloys for electrical engineering;
- Special materials for airline and energy industry;

Learning delivery: Lectures are realizing with multimedia, with techniques of active learning and with active participation of students. Laboratory exercises are held in laboratory for material science.

Assessment Rationale: Assessment concept is based on continuous work with students during semester. Evaluation methods include: assessment of performed laboratory exercise, assessment of both individual and group work on given topics (use of literature, written reports for the given theme and oral presentation). Each activity is evaluated and awarded with certain points. The reason for using several methods of evaluation is to give an opportunity to students to fully express their knowledge in the best way they can (some in written, form, some in verbal and some in practical.
Laboratory exercises: 30%
Active participation on lectures: 15%
Preliminary and final exams: 55%

Essential Reading: 1.

- Sreto Tomašević "Dizajniranje tehničkih materijala" izdavač; Apeks Zenica 1999 .god.
- Džafer Kudunović "Savremeni materijali" Mašinski fakultet Tuzla , Skripta 2009 god.
- Fuad Ćatović "Nauka o materijalima" (Novi materijali) Mašinski fakultet mostar i Tehnički fakultet Bihać 2001.god.
- "Journal of Engineering Materials and Technology", Washington State University, ISSN: 0094-4289.
- Journal - „Mathematics and Mechanics of Solids", University of California.

Intranet web reference: n.s.
Validation date: 07/16/10

MODULE DESCRIPTION
Measurements

Full Module Title:	Measurement
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	First Cycle BiH QF and FQ-EHEA
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	none
Assessment:	100% in course assessment
Date validated:	07/16/10

Module aims:

- To introduce students with the basic terms in metrology,
- Identify international organizations involved in regulation of legislative in mechanical engineering,
- Apply the statistical methods for measuring data analysis,
- To demonstrate and calculate the measurement uncertainty,
- To measure some physical quantities which are relevant for mechanical engineering.

Learning outcomes:

On successful completion of this module the student will be able to:

- Recognize and assess the impact of international and national regulation, legislation and codes of practice in mechanical engineering.
- To apply measurement technique on mechanical parts, measure physical quantities and calculate measurement uncertainty.
- To use the appropriate statistical methods for measuring data analysis.
- To measure time, velocity, acceleration using different methods and techniques with appropriate instruments.
- To measure force, torque, stress and strain by strain gauges.

MODULE DESCRIPTION
Measurements

Indicative syllabus content:	The importance of metrology for technical progress and its tasks. The international metrology organizations. The static and dynamic characteristics of measuring systems. Measuring systems of zero, first and second order. The basic statistics terms. Errors in measurement: types of errors, errors in indirect measurement, limiting errors. The measurement uncertainty. Measuring of the mechanical quantities with electrical methods. Sensors: electromagnetic, piezoelectric, capacitive, resistors. Measuring of time. Measuring of velocity and acceleration. Measuring of force, torque, stress and strains by strain gages. The principals of pressure measuring. The elastic pressure transducers. The principal of temperature measuring. The expanding temperature sensors.
Learning delivery:	This module employs a range of teaching and learning methods, with techniques of active learning and with active participation of students. Students have laboratory exercises in modern equipped laboratory where use different techniques and instruments for industrial practice. During semester it will be organized two visits to successful BIH companies which have laboratories for measurement in their production process.
Assessment Rationale:	Assessment includes both theoretical gained knowledge and practical skills. Also, students have to be able to work in team and independently.
Assessment Criteria:	Assessment is based on continuous work with students during semester. Students will have short answer tests after every laboratory exercises, also will have practical simulations of measurement method on different instrument or machine, to learn to work individually as well in team, to learn how chose the best method to calculate measuring results etc. Evaluation method is based on giving points for each activity and examination during semester as well as on final exam. • Laboratory exercises: 20% • Active participation on lectures: 15% • Preliminary and final exams: 65%
Essential Reading:	• M. Popović, Senzori i mjerenja, Svjetlost, Sarajevo, 1992. • H. Bašić, Mjerenja u mašinstvu, Mašinski fakultet Sarajevo, 2005. • E. Seferović, H. Bašić, Osnovi metrologije i obrade rezultata mjerenja, Mašinski fakultet Sarajevo, 2005.

MODULE DESCRIPTION
Measurements

- R. Bajramović, M. Pašić, H. Bašić, E. Kadrić, Analiza podataka, Mašinski fakultet Sarajevo, 2005.
- R. B. Northrop, Introduction to Instrumentation and Measurement, CRC Press, N. York, 1997.
- IEEE Instrumentation & Measurement Magazine.

Intranet web reference: n.s.
Validation date: n.s.

MODULE DESCRIPTION
CAM Systems

Full Module Title:	Computer Aided Manufacturing Systems
Short Module Title:	CAM Systems
Module Code:	ME 308
Module Level/BiH cycle:	First Cycle BiH QF and first cycle FQ-EHEA
ECTS credit value:	5 ECTS
Length:	one semester
School:	Mechanical Engineering
Department:	Production Engineering
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	BA Mechanical Engineering
Module status (core/option):	Required core module
Pre-requisites:	CAD, Introduction to Programming
Co-requisites:	n.s.
Access restrictions:	n.s.
Assessment:	100 % in-course assessment. The students have three colloquiums (theory) and seminar work (case study).
Date validated:	07/16/10

Module aims:

The module aims to:

- Train a student to make CNC programs for different parts and machining
- Educate a student to be familiar with the modern concept of Computer Aided Manufacturing
- Equip students with transferable skills of value in future work contexts

Learning outcomes:

On successful completion of this module the student will be able to

- use different CNC part program for manufacturing,
- apply modern software for Computer Aided Manufacturing (CAM),
- demonstrate teamwork to make the CNC program,
- make a driver program for the machining of various parts,
- evaluate the optimal tool path (which has the least loss of machining time);

Indicative syllabus content:

- Computer Integrated Manufacturing CIM
- Computer Aided Process Planning CAPP
- Design and Programming of Technological Processes on CNC machines Computer Aided Manufacturing (CAM)

MODULE DESCRIPTION
CAM Systems

- Computer Controlled Machining Systems
- Control Systems of CNC Machines
- Reference Points in the Programming
- Main Functions in the Programming
- Auxiliary Functions in the Programming
- Manual Programming
- Computer programming
- Integration of CAD-CAM
- Modern software for CAD / CAM Programming

Learning delivery:

The teaching and learning methods should encourage students to work both independently and as a member of team. Also, the methods are such that students gain knowledge about the importance of lifelong learning. The methods include:

- lectures,
- exercise (case study) The students have to make seminar work where they solve a practical problem. Usually it is to make the CNC program for machining of some machine's part. They work in team.
- laboratory exercises making a part using CNC program,
- presentation of student's papers - seminar works;

Assessment Rationale:

Students should have adequate theoretcial knowledge that will be checking on the colloquium. Students will demonstrate practical skills through seminar work. Seminar work will be done in teams of 3 to 6 students, so it is expected that students demonstrate the teamwork and communication skills.

Assessment Criteria:

The criteria upon which the marks will be allocated are as follows:

- The presence and participation in class - weighting 10%
  - The presence 5%
  - The participation in class 5%
- Three colloquiums (It is periodical checks of knowledge - theory) - weighting 60%
  - The 1st colloquium 20%
  - The 2nd colloquium 20%
  - The 3rd colloquium 20%
- Seminar work (case study) - weighting 30%
- Accuracy of the technological process 20%
- Level of understanding and independence demonstrated 10%

MODULE DESCRIPTION
CAM Systems

Assessment Weighting:	There are three elements to the assessment and marks are allocated as follows: • The presence and participation in class 10% • Three colloquiums 60% • Student's seminar work (case study) 30%
Essential Reading:	• Dž. Tufekčić, M. Jurković, R. Šelo, J. Osmanović "Programiranje na CNC mašinama", Tuzla, 2001. godine • I. Zeid „Mastering CAD/CAM“, McGraw-Hill Science, ISBN: 0072868457, 2004. • D.Tiro, A. Fajić „3D printanje i ostali postupci brze izrade“, Mašinski fakultet Mostar, 2008.
Supplementary reading:	Journal: Advances in Production Engineering & Management (APEM), University of Maribor, Slovenia
Intranet web reference:	n.s.
Validation date:	July 12, 2010

MODULE DESCRIPTION
Quality Management

Full Module Title:	Quality Management
Short Module Title:	n.s.
Module Code:	ME317
Module Level/BiH cycle:	First cycle BiH QF and FQ-EHEA
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	yes
Module status (core/option):	core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	n.s.
Assessment:	continuous assessment, written and oral
Date validated	07/16/10

Module aims:

the students will

- Identify and evaluate the impact of international organizations involved in regulation of legislative in mechanical engineering, and also to use actual standards for preparing procedures and quality manuals.
- Identify primary principles that contribute quality assurance both in theory and in practice, in organizations and in the industry,
- Obtain insight into quality management systems practiced in the region,
- Gain understanding of quality assurance systems implemented in BiH industry,
- Enhance their ability to contribute effectively to quality management issues.

Learning outcomes:

On successful completion of this module the student will be able to:

- Understand and describe the network of organizations responsible for national and international regulation and legislation in industry.
- Recognize the differences between quality control, assurance and management and gain awareness of how professionals working in these areas.

MODULE DESCRIPTION
Quality Management

- Understand how and why statistical tools are used to assure quality control.
- Know which procedures are involved in the international and national accreditation of companies.
- Gain understanding of management of an internationally accredited quality control laboratory.

Indicative syllabus content: Quality management QM, basic principles and philosophy. House of quality. Accreditation and certification. Elements of QM according to ISO 9000ff. Procedures and Quality manual. Audit. TQM. Analytical tools used to evaluate product quality.

Learning delivery: Lectures are realizing with multimedia, with techniques of active learning and with active participation of students. The teaching and learning methods should encourage students to work both independently and as a member of team. Also, the methods are such that students gain knowledge about the importance of lifelong learning. The methods include:

- lectures,
- exercise (case study) The students have to make seminar work where they solve a practical problem. They work in team.
- presentation of student's papers - seminar works.

During semester it will be organized two visits to successful BIH companies with certified quality management system according to the latest standard.

Assessment Rationale: Assessment includes both theoretical gained knowledge and practical skills. Also, students have to be able to work in team and independently.

Assessment Criteria: Assessment is based on continuous work with students during semester. Students will have short answer tests after every laboratory exercise, also will have practical simulations of preparing procedures, quality manual according to standards, to learn to use quality management tools, to learn to work individually as well in team. Evaluation method is based on giving points for each activity and examination during semester as well as on final exam.

- Laboratory exercises: 20%
- Active participation on lectures: 15%
- Preliminary and final exams: 65%

Essential Reading:

- Klarić S., Upravljanje kvalitetom, Univerzitet Džemal Bijedić, MF Mostar, ISBN 9958-9470-4-8, 2005.

MODULE DESCRIPTION
Quality Management

- Klarić S., Upravljanje kvalitetom-Alati I metode poboljšanja, MF Mostar, ISBN 978-9958-604-40-9, 2009.
- Bobrek M.,QMS Design-projektovanje sistema menadžmenta kvalitetom, Mašinski fakultet, Banja Luka, ISBN 86-7392-014-0, 2000.
- Juran J.M., Quality Control, Handbook, Mc Grow-Hill Book Company, 1974.
- International Journal of Productivity and Quality Management (IJPQM)
  ISSN (Online): 1746-6482 - ISSN (Print): 1746-6474

Intranet web reference: n.s.
Validation date: n.s.

ANNEX VII

CASE STUDY 2
ENGLISH LANGUAGE WORKING GROUP

EXAMPLE CURRICULUM
MA IN TEACHING ENGLISH

This document was developed by a team of subject experts in the course of a joint exercise of 9 BiH universities under the joint EC/CoE project "Strengthening Higher Education in BiH" (2009-2011).

Due to time and resource restrictions it was not possible to produce a full set of modules that encompasses complete qualifications.

It is an illustrative example, demonstrates approaches and solutions for defining learning outcomes, including transferable skills, the employability agenda, student-centred learning, varied assessments, etc. and is designed as a resource for those responsible for staff development and academics in curriculum development teams.

QUALIFICATION HANDBOOK
MA in Teaching English

Faculty name	
Name of the programme	MA in Teaching English
Academic degree	
Study cycle	2nd cycle FQ-EHEA and 2nd FQHE-BiH
Language of study	English
Estimated length of the study	2 academic years
Programme leader/head of department	
Contact information	
Web	

1 Introduction to the Discipline and Qualification

In our globalised society, competence in English is an ever more vital skill, and the teaching of English is, likewise, a profession in high demand. Teachers of English must be well-versed in the English language itself, as well as having a thorough knowledge of teaching methodology and a range of teaching techniques.

The ability to use a foreign language is, by any definition, a useful acquisition and one which is held in high regard by employers. Graduates in languages have the highest employability rates of all humanities graduates. Indeed, in securing jobs, graduates in some modern languages have been second only to graduates in more narrowly defined vocational subjects such as dentistry or veterinary medicine.

At the same time languages provide a rich and rewarding educational experience for students. The study of languages at university level is a multidisciplinary learning process, allowing access to a broad range of enquiries, including linguistic, literary, cultural, social, political and historical studies.

2 Rationale Statement

Through theoretical and practical training, this MA in Teaching English will prepare students thoroughly in the important and constantly changing field of teaching English. By completing this program, students will be well prepared to teach English to speakers of other languages and will be attractive candidates for jobs in this field. Through a

progression from theory to practice, this MA program is designed to equip candidates to teach English with alternative pathways specialising in one of the following age levels at primary, secondary and adult educational levels. They will be prepared to do this through a combination of theoretical and practical training.

Prior to teaching their own classes, candidates will study the theory of teaching, language acquisition and psychology of language learning, as well as observe expert teachers in their classrooms. Throughout the MA course, students will continue to improve their own English language skills through Contemporary English courses. Through seminars, research, writing, practical teaching experience, and observation, candidates will be well prepared to teach, and to deal with the challenges they face in their careers.

Compared to more theoretically based BA programs, this MA focuses on practical teaching experience in the classroom, as well as demanding a higher level of independent research. Upon completing this MA, students will be prepared to teach, and/or to continue their studies at the doctoral level.

Upon successfully completing this field of studies, candidates will not only be eligible to teach English to young learners, but will also reach a higher level of English language proficiency, C1.[1]

3 Overall Qualification Learning Outcomes

Upon successful completion of the MA Program in Teaching English students will be able to

- Select and employ various teaching methods appropriate for age groups in question
- Critically evaluate and make appropriate decisions in choosing among competing English foreign language teaching ideas
- Foster skills in undertaking independent investigation of areas of English foreign language teaching
- Knowledge of vocabulary and grammar necessary for communication with specialized and non-specialized audiences
- Select and apply appropriate teaching methodologies associated with:
  - The design, preparation and teaching of classes using a range of materials
  - Setting course objectives to meet diverse students' needs
  - Being able to articulate his or her approach
- Efficiently function at C1 proficiency[2] level in all four skills (reading, writing, speaking, listening)
- Conduct independent research on aspects of English language teaching

[1] http://www.coe.int/t/dg4/linguistic/source/Framework_EN.pdf

[2] C1 proficiency as defined by Common European Framework of Reference

4 Structure of the Qualification

4.1 List of Core and Subject Specific Option Modules

If you look at the chart below, you can see the following:

Semester 1: 4 Core courses (at 5 credits each) + 1 Elective (5 credits) = 25 credits

Semester 2: 3 Core courses (at 5 credits each) + 1 Elective (5 credits) = 20 credits

Semester 3: 3 Core courses (at 5 credits each) + 1 Elective (5 credits) = 20 credits

Semester 4: 2 Core courses (at 5 credits each) + MA thesis

Course (Semester)	Type of Course (Core-C, Elective-E)	ECTS
Contemporary English Language 7 (1)*	C	5
ELT Methodology/Glotodidactics(1)*	C	5
Methodology of Scientific Work (1)*	C	5
General Psychology (1)	C	5
Psychology 101 Young learners (1)	E	5
Psychology 102 teenagers (1)	E	5
Psychology 103 adult learners (1)	E	5
Contemporary English Language 8 (2)*	C	5
Second Language Acquisition (2)*	C	5
Classroom Management (2)	C	5
New Trends in ELT (2)	E	5
Sociolinguistics (2)*	E	5
Contemporary English Language 9 (3)	C	5
Practicum 1 (3)*	C	5
Contemporary Culture and Language Education (3)*	C	5
ELT Methodology/SLA 301 young learners (3)	E	5
ELT Methodology /SLA 302 teenagers (3)	E	5
ELT Methodology/SLA 303 adult learners (3)	E	5
Contemporary English Language 10 (4)	C	5
Practicum 2 (4)*	C	5
Final Paper (MA Thesis) (4)*	C	5

* module description included

4.2 Program structure:

Through all semesters of this course students will build their skills and knowledge through Contemporary English courses. Focus on independent learning and research will increase toward the end of the program, culminating in the MA Thesis. Theoretical knowledge of methodology early on will be combined with more practical work in later semesters. Within their age-group specialization(s), students will have two course options as well as their practical experience to focus on the age group of their choice.

4.3 Progression:

Transitioning period:
Each applicant will be treated on an individual basis. If a candidate comes from a 3 year BA program, he/she will have to take all core courses, and elective courses (see rules). As for the candidate who has completed four years and want to study in this program, the curriculum will be compared to the curriculum of the institution where the student obtained a BA and if the modules match (NOTE: Given that we are working together, we can ensure that all modules in year four in the BA or MA program match). Some credits from previous education can be transferred (see rules).

Rules:
This means that some of the core courses may be transferred. As for the other core and elective courses, the student will follow the rules of the institution. Each candidate has to complete all core courses. Should a candidate hold a BA degree from a 4-year program, he/she can transfer credits if the learning outcomes match, although this normally will be a full two-year course. A maximum of 30 credits (in full modules) may be recognized and transferred from BA programs for the purpose of exemption. For example, in fourth year of study, students have Contemporary English Language (CEL) 7 and 8. Given that this MA program requires that the students complete CEL 7 and 8, the credits can be transferred and the student can take CEL 9 and then 10. Candidates will design their own studies using the elective courses. In semester 1, all candidates have to take General Psychology a course that will serve as aid when it comes to determining which elective course to take. Candidates will be exposed to what Psychology 101, 102, 103 focus on and based on that information and the learners he/she wants to teach, the candidate will determine which elective psychology course he/she wants to take. Psychology 101 will focus on young learners, Psychology 102 on high school students, and Psychology 103 on adult learners. The elective courses ELT Methodology/SLA 101, 102, 103 are divided the same way at the psychology courses. Should a student choose to focus on young learners only, he/she has to take ELT Methodology/SLA 101. By doing so, the candidate will have a solid foundation when it comes to teaching young learners. Candidates are required to take one of the three courses offered, but may choose to take two or all of them. This will influence how long the student will need to complete the degree. It will also influence the type of diploma the candidate will receive at the end of his/her studies. Namely, if a candidate only focuses on young learners, his/her diploma will indicate that, and thus this particular candidate will only be eligible to teach young learners. As mentioned before, candidates have to take one, but may take two or all three of the elective courses.

5 University regulations

Not specifically mentioned

6 Specific qualifications regulations

Not specifically mentioned

7 Admission criteria

Cumulative GPA 8.0/10 (3.5/5)

Candidates who hold a BA degree in English Language and Literature	Candidates from other tracks
Cumulative CGPA 8.0 Should a candidate hold a BA degree from a 4-year program, he/she can transfer credits if the learning outcomes match. Letter of recommendation (if student remains at the same university no letter is needed)	CGPA 8.0 40 % of classes in English or pass the supplementary entrance exam, including an oral proficiency exam Should a candidate hold a BA degree from a 4-year program, he/she can transfer credits if the learning outcomes match.
If CGPA is below 8.0, student is required to take supplementary entrance exam, including an oral proficiency exam	
Students enter the program at the B2+ level and exit it at a C1 level	

8 Teaching & learning methods statement

The program will follow FQ-EHEA, CEFR and focus on the most current teaching methods including relevant and current research and reflecting it in teaching practice. To ensure that the students reach the C1 proficiency level, the instructors and the professors will use the newest teaching methods, including the practice of all four skills (reading, writing, listening and speaking). Once the students learn about second language acquisition in all three groups (young learners, teenagers and adult learners) they will decide which one of these groups they would like to focus on. In ELT Methodology/SLA classes, students will learn how to set course objectives in order to meet diverse students' needs, as well as develop their own educational philosophy. They will learn about applying appropriate techniques to teach students of different age groups and ability levels, but eventually, in the third semester, they will decide which group of learners they would like to focus on (of course the students have the opportunity to focus on all three groups). Students will also be exposed to how to conduct research to prepare for writing their MA thesis.

9 Assessment rationale

I. Coursework* [to include a range of methods specific to each module]
II. Student Teaching (Practicum)**
III. Thesis

Basic Procedural Description

During the final semester of the MA program, all students will be required to complete a MA Thesis. The topic for this research-based paper will be selected in consultation with a mentor/chair, and will be evaluated on a "pass/fail" basis by a committee of three faculty members, one of which being the mentor/chair. Plagiarism or missed deadlines will result in failure.
Students must present their research to the committee in a formal presentation/defense and be prepared to answer any questions from the committee at the conclusion of the presentation. The paper should be approximately 35-50 pages long and follow a consistent citation style and format, agreed upon by the student and mentor and in keeping with University standards.

Rationale for Assessment Methods

Coursework assessment will be based on a wide range of assignments including research papers, oral presentations , written and oral exams, reflective papers, journals, portfolios, and lesson plans. This variety will reflect students' progress in theory, self-awareness and preparedness to teach their own classes. Research will encourage independent learning and presentations will allow students to learn from each other and be prepared to lead a group of students.

Student teaching (practicum) assessment will be based on a reflective paper based on observation and own teaching, statement of teaching philosophy, journal, portfolio and classes taught. After observing the process of teaching, the candidate will be better prepared to teach their own classes which will then be practiced in the second semester of the practical course.

The successful completion of an MA thesis is an appropriate and important means of assessment, as students will be able to clearly demonstrate the level to which they have developed four particular skills: Problem Solving, Learning Skills, Self Management, and Communication.

- *Problem Solving*
  The process of writing a successful thesis requires that students first identify an existing problem or "issue" in their field, which needs to be researched and/or "solved". Strategic "options" for a solution must also be formulated prior to the actual writing. This is where the thesis statement begins to take shape.

- *Learning Skills & Self Management*
  Students must be able to work independently though in consultation with the mentor- using library skills and resources, to organize, analyze, and interpret information to support their arguments.

- *Communication*
  During the oral defence (and of course in the writing) of the thesis, students must use appropriate language to present their research to an audience, with aid of appropriate media, in an effort to rationally persuade listeners of the rigor of their work.

10 Generic assessment criteria

In evaluating written work (including portfolio and thesis), assessment will be based on:
- structure and organization, based on professors' specifications
- language use, including clear and grammatically correct use of English, spelling, punctuation
- quality of research (where appropriate)
- the use of properly referenced sources to support the points made

In evaluating oral presentations, assessment will be based on:
- structure and organization
- clarity and coherence (including pronunciation and fluency)
- knowledge of the subject
- body language
- rapport with students
- observation of time limits

In evaluating classes taught, assessment will be based on:
- preparedness of materials
- organization and structure of class
- observation of time limits
- creativity
- use of appropriate teaching methods based on age and ability
- meeting objectives of the class
- language use including clear and grammatically correct English and relevant vocabulary

11 Learning resources

For their research and MA Thesis, students will have access to a well-equipped library including relevant scholarly databases such as JSTOR.

Language labs and well-trained personnel will be available for students' own language skills.

Access to classrooms for observation and student teaching, as well as contact with current teachers, will be important learning resources for students in their practicum work.

12 Employability and transferable skills

The very idea behind this Master in Teaching English is to focus on students, and the knowledge and skills they cquire and apply on the market. The program is based on the current needs existing in Bosnia & Herzegovina, in line with the following:

- B&H is in a transitional period, but every day closer to the European Union, which consequently means a necessity for adjustment of procedures and standards in every aspect of the Bosnian society. The same apply to the teaching of English.
- European standards in foreign language teaching imply implementation of the *unity in diversity* concept, which focuses on both linguistic and cultural knowledge. Practically, it requires the use of the CEF scale[3] for language proficiency, which is integrated in this program in order to ensure that the skills our students acquire are comparable and transparent in Bosnia & Herzegovina, in the region and beyond in EU countries.
- In Bosnia & Herzegovina, due to the above mentioned integrative trends and processes leading toward the EU membership, these is an increased need for teaching of English as a foreign language in multiple contexts:
    - In elementary schools which have started introducing English classes from the first grade.
    - In high schools which are also in the process of reform and adjustment of their programs to the University education in B&H, with more specialized programs, more practical knowledge, including specific professional English classes.
    - Life-long learning meeting the needs of adults who work in different economic and industrial sectors. Due to the fact that EU standards and requirements are being more and more applied in purchase, bidding procedures and various other practices on a regular basis, there is an increased need for English classes for adults in Bosnia & Herzegovina.

Having all this in mind, and the fact that our students will acquire practical skills and perform practical (community-oriented) work during this program, along with transferable skills acquired, we can say that we offer very competitive and applicable skills and knowledge to our students that can be easily and practically used on the Bosnian market at the moment but also in the years to come.

13 Student support

Not specifically mentioned

[3] An official document of European Commisssion on foreign language learning and teaching

14 Linkages to external reference points

Matrix linking Second Cycle Teaching English Program to FQ-BiH descriptors

EXTERNAL REFERENCE POINTS	MODULE CODES										
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the **SECOND CYCLE (60-120 ECTS credits)**	Cont. Eng. Language 7	Cont. Eng. Language 8	ELT Method./ Gloto.	Cont. Eng. Language 9	2nd Lang. Acquisition	Method. Scient.Work	Sociolingui -stics	Practicum 1	Cont. Cult.& Lang.	Practicum 2	Thesis
have demonstrated a systematic understanding and mastering of knowledge in their field of study/discipline that is founded upon, and extends and/or enhances, that is typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context	X	X	X			X	X				
can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study				X	X	X		X	X	X	X
apply conceptual thinking and abstraction with a high level of proficiency and creativity, which will enable the: - critical evaluation of current research and academic work at the forefront of the discipline - evaluation of different methodologies, development of critical opinion and the raising of alternative solutions			X	X	X	X	X	X	X	X	X
have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments			X		X	X		X	X	X	X
can communicate their conclusions, and the knowledge and rationale underpinning these using appropriate language(s), to specialised and non-specialised audiences clearly and unambiguously	X	X	X	X	X	X	X			X	X
are able to take their own knowledge to a higher level, deepen the understanding of their field of study/discipline and continuously develop their own new skills through individual learning and self-development	X	X		X	X			X		X	X
have the learning skills to allow them to continue to study in a manner that may be largely self-directed and autonomous				X				X		X	X
have acquired interpersonal and teamwork skills appropriate to a variety of learning and employment contexts and also demonstrate leadership and/or initiative and make a contribution to change and development							X	X	X	X	

MODULE DESCRIPTION
Contemporary English Language 7

Full Module Title:	Contemporary English Language 7
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	MA students
Assessment:	10% participation 15% homework assignments 25% midterm written exam 40% final written exam 10% oral exam
Date validated:	n.s.

Module aims:

The aims of this module are to

- Improve students' overall language skills with a focus on writing
- Use interactive lessons to integrate grammatical and communicative skills
- Teach essay writing skills in a variety of contexts

Learning outcomes:

On successful completion of this module, students will be able to

- Use a range of techniques and strategies for essay writing (outlining, drafting, etc.)
- Assess reference sources and understand their relevance in essay writing
- Write a clear, well-organized opinion essay
- Identify and describe the syntactic patterns of English, as well as their relation to those of Bosnian/Croatian /Serbian
- Demonstrate correct grammar usage concerning word classes, verb patterns, clause elements, sentence patterns, movement rules

MODULE DESCRIPTION
Contemporary English Language 7

- Identify key cohesive devices used in connected discourse and explain the rules that govern the formation of words and sentences
- Recognize and correct basic grammar errors in simple, complex and compound sentences

Indicative syllabus content: This module will focus on both grammar and essay-writing skills. Each week's class will include a review of an advanced grammatical structure. In addition, the remainder of each class will be devoted to an element of essay writing. Sample grammatical elements include: verb complementation, participle and infinitive phrases, gradable and ungradable adjectives. Essay writing elements include: paragraph structuring and development, outlining, paraphrasing, revising.

Learning delivery: Students will be required to prepare for classes by reading assigned texts and completing assigned exercises. Grammar will be taught by a combination of professor presentation/lecturing and student group work. Grammatical structures will be practiced in both controlled and improvised settings in language labs and in conversations with peers. Writing skills will be presented by the professor, discussed in class, and executed independently both in class and out of class.

Assessment Rationale: As language learning is an ongoing process, assessment in this course includes active class participation and regular completion of homework assignments, which will ensure that students study and prepare regularly for classes. The two in-class exams will include grammar portions based on the target structures discussed and practiced in class, as well as essays. Essays will be assessed based on the structures and elements practiced in class. The oral component of the final exam, as well as the participation grade, will ensure that oral communication skills remain strong.

Assessment Criteria: In this course, students should:

- Improve their writing skills
- Strengthen their organizational thinking skills
- Practice working independently

Assessment Weighting: Active, high-quality participation: 10%
Homework assignments: 15%
Mid-term written exam (includes grammar portion and essay): 25%

MODULE DESCRIPTION
Contemporary English Language 7

	Final written exam (includes grammar and essay): 40% Final oral exam: 10%
Essential Reading:	Creme, P. & M.R. Lea, Writing at University: A Guide for Students. Buckingham: Open University Press, 1997. Hewings, M. Advanced Grammar in Use. Cambridge: Cambridge University Press, 2005.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Language Teaching Methodology (Glotodidactics)

Full Module Title:	Language Teaching Methodology (Glotodidactics)
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	MA students
Assessment:	Paper: 30% Lesson Plans: 30% Unit Plan: 30% Active Class Participation: 10%
Date validated:	n.s.

Module aims:

The aims of this module are to

- Familiarize students with major theories in foreign language teaching and learning
- Introduce students to theories and research about how second/foreign language classrooms operate
- Have students practice applying these theories by designing lesson plans and assessment techniques

Learning outcomes:

On successful completion of this module, students will be able to

- Identify and explain the basic concepts and main theories of English Language Teaching (ELT)
- Debate the pros and cons of different methods and approaches to ELT
- Critically analyze current research and trends in foreign language pedagogy
- Assess how approaches to ELT can be modified to suit the needs of a particular group of students
- Apply theories of language teaching and language acquisition in lesson plans for a wide range of students
- Plan a unit for an English language classroom for a specific age group and language level

MODULE DESCRIPTION
Language Teaching Methodology (Glotodidactics)

Indicative syllabus content: This module will integrate theory and practice to give students a broad overview of theories, research, and methodology of teaching and learning English as a foreign language. The syllabus will include discussions of the history of ELT, research in error correction, evaluation, the role of the teacher and student. Methodology of teaching the four major linguistic skills (speaking, listening, reading, writing) will be addressed, as well as differences in learning styles and teaching strategies based on age, motivation, and multiple intelligences.

Learning delivery: This module will employ a variety of teaching and learning modes. Students will read a variety of key texts in the field of ELT, and discuss these texts with their peers and their professor, as well as comparing and analyzing them in a paper. Class time will include some lectures, but will focus on discussion and critical analysis of these issues that will face English language teachers daily in their classrooms.

Assessment Rationale: The three assessment projects are designed to ensure that students are able to understand and process the course material, as well as giving them an opportunity to apply this material in creative and relevant ways. Both the analytical paper and the lesson plans will be broad enough to address issues facing all ages and levels of students, which will ensure that students have a broad understanding of the issues facing language learners in a variety of situations. In the unit plan, students will have a chance to focus their research and work in anticipation of the specialization they have chosen within the MA program.

Assessment Criteria: In this course, students should:

- Practice analyzing and interpreting research and data
- Communicate their ideas and conclusions clearly in writing
- Apply their knowledge creatively and relevantly to new situations
- Have knowledge that provides a basis for originality in developing or applying ideas

Assessment Weighting: Paper: 30%
Lesson Plans: 30%
Unit Plan: 30%
Active Class Participation: 10%

Essential Reading: Selections, to be assigned by the professor, from the following:

MODULE DESCRIPTION
Language Teaching Methodology (Glotodidactics)

Richards, J.C. and Renandya, W.A. (eds): *Methodology in Language Teaching: An Anthology of Current Practice.* Cambridge: Cambridge University Press, 2003.
Ur, Penny. *A Course in Language Teaching: Practice and Theory.* Cambridge: Cambridge University Press, 1996.
Luria, H., Seymour, D.M. & Smoke, T. *Language and Linguistics in Context: Readings and Applications for Teachers.* Mahwah, NY: Lawrence Erlbaum, 2006.

Intranet web reference: n.s.
Validation date: n.s.

MODULE DESCRIPTION
Methodology of Scientific Work

Full Module Title:	Methodology of Scientific Work
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	MA students
Assessment:	Written exam: 20% First research paper: 20% Original research plan and findings: 20% Final paper: 40%
Date validated:	n.s.

Module aims:

The aims of this module are to

- Introduce students to the practice of scientific research, with a specific focus on researching in the fields of English Language Teaching, pedagogy
- Give students practical training in finding, assessing, and integrating other scholars' research into their own writing
- Prepare students for the scientific work that will be required of them in later semesters
- Train students in using the library databases, internet research and other sources in conducting research

Learning outcomes:

On successful completion of this module, students will be able to

- Conduct independent scholarly research from a variety of sources on a topic related to education
- Design and execute a small scale original research project
- Analyze and interpret this research thoughtfully and coherently
- Integrate research into an academic paper

MODULE DESCRIPTION
Methodology of Scientific Work

	• Accurately and consistently cite research sources using appropriate citation style, both in text and bibliographically
Indicative syllabus content:	This module will provide students with the tools to conduct, analyze and discuss the research that will be expected of them in the course of this Masters program. Classes will begin with secondary source research, analysis, citation, and integration in writing, focusing on research culled from scholarly journals, books, and other written sources. Later in the semester, the focus will move toward original research, including action research, surveys, and interviews.
Learning delivery:	The course will include lectures as well as a significant amount of independent and small-group work for hands-on practice. Students will present their work to their peers on a regular basis.
Assessment Rationale:	In a practical course such as this, active engagement and practice are key. Therefore, students will be assessed based on their completion of various tasks related to conducting and analyzing research. A written exam in the first half of the semester will ensure that students understand the basic groundwork of researching, citing, and analyzing texts, while the rest of the assessments will be based on the students' original research, analysis, and writing.
Assessment Criteria:	Students should be able to: • Conduct independent research • Apply theoretical knowledge in undertaking practical research • Integrate and analyze information, opinions, and research from multiple sources • Work successfully and effectively in small groups
Assessment Weighting:	Written exam: 20% First research paper (using secondary sources on a topic related to education of student's choice): 20% Original research plan, execution, and findings: 20% Final paper (incorporating original research): 40%
Essential Reading:	Wallace, M. *Action Research for Language Teachers.* Cambridge: Cambridge University Press, 1998. Norris, J. & Ortgea, L. *Synthesizing Research on Language Learning and Teaching.* Manoa, Hawaii: University of Hawaii, 2009.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Contemporary English Language 8

Full Module Title:	Contemporary English Language 8
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	Contemporary English 7
Co-requisites:	none
Access restrictions:	MA students
Assessment:	10% participation 15% homework assignments 25% mid-term research essay (including oral component) 40% final written exam 10% final oral exam
Date validated:	n.s.

Module aims:

The aims of this module are to

- Further improve students' language skills, focusing on writing and grammar
- Expand essay-writing skills with a focus on research essays
- Improve spoken skills through oral presentations

Learning outcomes:

On successful completion of this module, students will be able to

- Research and critically select reference sources for academic writing
- Organize ideas into a well-structured essay
- Explain and understand the basic meta-language of grammar
- Practically apply grammatical concepts into writing and speaking
- Present their research and thoughts in a coherent oral presentation

Indicative syllabus content:

Similar to Contemporary English 7, classes will be based on material that students will be required to prepare in

MODULE DESCRIPTION
Contemporary English Language 8

advance. Classes will include grammar review and practice in written and spoken situations. Content will include background and instruction in research and essay writing. Students will present their own independent research to each other in class.

Learning delivery: The course will include lectures, controlled grammar exercises, group work and independent work and research. The professor will maintain contact with each student as they progress through their research and essay writing. Peer feedback will be part of students' oral presentations and practice.

Assessment Rationale: The ongoing nature of this course's assessment reflects the importance of continuous practice and diligence in language skills. The midterm research essay will be a small-scale demonstration of students' ability to research, analyze, and cite their work. The final exam will include an in-class essay that should be well-organized and persuasive. Both the mid-term and final exam include an oral component where students will be asked to present and defend their essays.

Assessment Criteria: Students should be able to:

- Conduct independent research
- Apply theoretical knowledge in undertaking practical research
- Integrate and analyze information, opinions, and research from multiple sources
- Work successfully and effectively in small groups

Assessment Weighting:
10% participation
15% homework assignments
25% mid-term research essay (including oral component)
40% final written exam
10% final oral exam

Essential Reading:
Foley, M. & Hall, D. *Advanced Learners' Grammar.* London: Longman, 2003.
Levin, P. *Write Great Essays! Reading and Essay Writing for Undergraduates and Taught Postgraduates.* Oxford: Oxford University Press, 2004.

Intranet web reference: n.s.
Validation date: n.s.

MODULE DESCRIPTION
Second Language Acquisition

Full Module Title:	Second Language Acquisition
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	MA students
Assessment:	Research Paper: 40% Interview and Reflective Paper: 40% Discussion Leading: 10% Active Participation in Discussions: 10%
Date validated:	n.s.

Module aims:

The aims of this module are to

- Teach students about the process of second language acquisition and foreign language teaching, as well as the stages of inter-language development
- Introduce and discuss theories of second/foreign language acquisition and bilingualism in a variety of contexts
- Integrate theoretical and personal understandings of SLA
- Encourage students to reflect on the course content in the context of their own teaching and learning

Learning outcomes:

On successful completion of this module, students will be able to

- Summarize and explain the broad stages of language development and acquisition
- Analyze and discuss current theories and research in the field of SLA and multilingualism
- Draw connections between personal experiences of language learners and theoretical frameworks and research on the subject

MODULE DESCRIPTION
Second Language Acquisition

- Lead a conversation among other students or professionals regarding tools and methods of second language teaching
- Identify cultural and social factors which influence second language learning and discuss responses to the challenges these factors may create

Indicative syllabus content: Students will read theoretical and research-based articles and books and discuss these in class with their colleagues and professor. An in-depth interview with a second language learner will be the practical basis for a reflective paper integrating both theoretical and practical experience. Class discussions will be led by a student, who will be required to prepare for this class as a professor or teacher would.

Learning delivery: Candidates will read a variety of key texts in the field of Second Language Acquisition and Second Language Teaching, and discuss these texts with their peers, their professor, as well as comparing and analyzing them in a paper. Candidates will read texts outside of class and discuss them during class time. These discussions may include role-playing in teaching methodologies and language acquisition, as well as analyzing films of language-learning classrooms. Candidates will also do independent library research for their initial paper, and conduct an interview and analyze its content in their final paper.

Assessment Rationale: The first research paper candidates will complete will require a clear understanding of the concepts discussed in classes, as well as an ability to independently deepen that knowledge. The second paper will bring this background into a more practical and personal context, where candidates will compare their theoretical knowledge to the first-hand experiences of language learners. This second assignment will require the skills that candidates will use in their own teaching, as they will be required to integrate their background knowledge into the specific and daily needs and demands of students. Assessment based on leading and participating in discussions will foster a classroom environment of curiosity and leadership. It will also ensure that, in addition to their more specific areas of focus in their research, candidates are conversant in the basic theoretical and research groundwork presented in required reading.

MODULE DESCRIPTION
Second Language Acquisition

Assessment Criteria:	In this module, students should: • Discuss theoretical and professional topics clearly and fluently • Conduct independent research • Apply personal experience to theoretical knowledge • Write clearly for a professional audience • Present information clearly and foster discussion among peers
Assessment Weighting:	Research Paper: 40% Interview and Reflective Paper: 40% Discussion Leading: 10% Active Participation in Discussions: 10%
Essential Reading:	Lightbown, P. & Spada, N. How Languages are Learned. Oxford: Oxford University Press, 2006. Dornyei, Z. "Attitudes, orientations, and motivation in language learning: Advances in theory, research, and applications." IN Z. Dornyei (Ed.), Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. Blackwell: Malden, MA, 2003. Additionally, articles from scholarly journals to be determined by the professor
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Sociolinguistics

Full Module Title:	Sociolinguistics
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5 ECTS
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Elective
Pre-requisites:	none
Co-requisites:	none
Access restrictions:	MA students
Assessment:	10% class participation 10% class discussion presentation 40% project 40% final paper
Date validated:	n.s.

Module aims:

The aims of this module are to

- Introduce students to the relationship between language and society
- Explore variations in language and how such variation is related to identity and culture
- Discuss and examine educational, political, and social repercussions of sociolinguistics
- Work in groups on a project related to an aspect of sociolinguistics of their choice

Learning outcomes:

On successful completion of this module, students will be able to

- Explain and discuss social factors influencing language variation
- Interpret research in sociolinguistics related to ethnicity, gender, class, and language
- Present an original project based on an in-depth study of a sociolinguistic issue related to language teaching or learning
- Write an informed analysis from a sociolinguistic perspective of a real-life issue related to language and culture

MODULE DESCRIPTION
Sociolinguistics

Indicative syllabus content:	The syllabus will include chapters and texts related to language and social attitudes, class, ethnicity, and gender. The course will also examine how the social context of language influences language learning and teaching, in and beyond the classroom.
Learning delivery:	A small group of students will be assigned to present the material at the beginning of each class, based on the assigned readings and homework. The professor will supplement this presentation and guide class discussions. Students will work extensively in groups in designing and executing their projects, which will also include independent research. Students' final papers will be researched and written independently, with support from the professor.
Assessment Rationale:	Because this is an introductory course in a large and varied field, students will be assessed based on research and projects that interest them within this field. Their projects and final research paper will be assessed based on their relevance and content within the discussed topics of sociolinguistics, as well as their creativity and outside research. The skills of this work will benefit students throughout their academic careers, while giving them an introduction to sociolinguistics as it applies to their teaching.
Assessment Criteria:	Students should be able to: • Work independently and diligently on an independent project • Draw connections between their personal experiences and concepts in academic work • Work in small groups • Clearly articulate their thoughts in formal writing
Assessment Weighting:	10% class participation 10% class discussion presentation 40% project 40% final paper
Essential Reading:	Chambers, J.K. *Sociolinguistic Theory: Linguistic Variation and its Social Significance*. Oxford: Blackwell, 2009. Trudgill, P. *Sociolinguistics*. London: Penguin Books, 1995.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Contemporary English 9

Full Module Title:	Contemporary English 9
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	Contemporary English 7 & 8
Co-requisites:	Teaching Practicum One
Access restrictions:	MA students
Assessment:	Oral presentation 1: 15% Oral presentation 2: 30% Final paper: 40% Self-evaluation, proofreading: 15%
Date validated:	n.s.

Module aims:

The aims of this module are to

- Improve and refine English knowledge through reading, writing, listening, speaking
- Integrate co-requisite practical teaching experience into writing and speaking assignments
- Practice reviewing and analyzing academic work in oral and written contexts

Learning outcomes:

On successful completion of this module, students will be able to

- Speak in a professional or academic setting about their teaching experience and philosophy
- Write an academic paper analyzing their practical experience and conforming to academic writing standards (organization, paragraph use, language accuracy)
- Understand and explain professional articles about second language teaching and language acquisition
- Independently identify and study common errors or sources of confusion in English grammar, sentence structure, word order, and word use

MODULE DESCRIPTION
Contemporary English 9

Indicative syllabus content:
The syllabus will include texts and sources related to improving English for advanced learners. The bulk of the readings and homework assignments, however, will be scholarly articles and papers that students will be asked to assess and analyze using target language skills.

Learning delivery:
The content of this course will include a significant amount of student input and initiative. In discussing academic articles for content and comprehension, one student will serve as the discussion leader each week. By this level of Contemporary English, the professor's role will be more of a guide than a lecturer. A focus of this course is helping students develop the tools to identify their own errors, sources of confusion, and questions, and to solve these situations independently.

Assessment Rationale:
The four assessed assignments in the semester focus around the main learning outcomes of the course. By successfully completing these assignments, students will have demonstrated their ability to read and understand academic texts, to speak in a professional setting, to write academically, and to independently improve their formal language skills.

Assessment Criteria:
Students should be able to:

- Summarize scholarly and professional research and writing
- Analyze and assess their own experiences for a professional audience
- Integrate research and personal opinions and analysis in writing
- Evaluate their own work and the work of their peers

Assessment Weighting:
Oral presentation summarizing an academic or professional article in the field of education or second language acquisition (15%)
Oral presentation for an academic or professional setting introducing and assessing student's initial practicum experience (30%)
Final paper analyzing students' practicum experience in the context of research and theories of language teaching and learning (40%)
Self-evaluation of English usage and identification of errors and sources of confusion in previous written and oral work (15%)

MODULE DESCRIPTION
Contemporary English 9

Essential Reading:	Leech, G. & Svartvik, J. *A Communicative Grammar of English.* Pearson ESL, 2003. McCarthy, M. & O'Dell, F. *English Vocabulary in Use, Advanced.* Cambridge: Cambridge University Press, 2002. Plus additional texts and scholarly articles to be assigned.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Practicum I: Seminar/Observation/Teaching Practice

Full Module Title:	Practicum I: Seminar/Observation/Teaching Practice
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	None
Co-requisites:	Contemporary English 9
Access restrictions:	MA English Teaching Students
Assessment:	Course will be assessed on a pass/fail basis. Students must complete all of the following in order to receive a pass: Ten hours of classroom observation Fifteen hours of volunteer teaching Journal Reflective paper Statement of teaching philosophy Self-evaluation
Date validated:	n.s.

Module aims:

The aims of this module are to

- Introduce students to classroom procedures such as needs assessment, goals, objectives, lesson planning, classroom dynamics and management
- Learn about teaching through focused observation in a classroom
- Begin to implement their own teaching methodology through volunteer teaching
- Document and reflect on their early teaching observations and experiences

Learning outcomes:

On succession completion of this module, students will be able to:

- Articulate their own goals as teachers through observing other teachers and their pedagogical practices

MODULE DESCRIPTION

Practicum I: Seminar/Observation/Teaching Practice

- Reflect upon their own teaching and self-evaluate their strengths and weaknesses as teachers
- Articulate a statement of teaching philosophy
- Assist in professional preparation for teaching
- Work as early professionals rather than students in the classroom
- Serve local communities as a teacher in ways that draw upon their developing expertise as EFL/ESL teachers

Indicative syllabus content: As this is a practical training course, the syllabus will be composed of students' own experiences as observers and novice teachers. The majority of the module content will include students' experiences in classrooms, as well as their independent reflections and self-evaluations. Students will meet together once each week for a seminar to share ideas and experiences. They will be in close one-on-one contact with their mentors throughout the semester.

Learning delivery: The content of this course is primarily composed of students' individual experiences in their classrooms. Learning will take place through observation, teaching practice, and reflection on these encounters. Students will be in close contact with their mentors throughout the semester to deal with any challenges or difficulties that may arise. Students will meet for weekly discussions with their peers to brainstorm and share ideas.

Assessment Rationale: In addition to required hours of participation in their assigned classrooms, this course asks students to continuously and intensively reflect on their experiences and to connect these reflections to their earlier coursework in this MA program. Because of the personal, individual, and reflective nature of the writing for this course, it will be graded simply as satisfactory (pass) or unsatisfactory (fail).

Assessment Criteria: Students should be able to:

- Apply theoretical knowledge to practical situations
- Work independently in a professional setting
- Write and speak reflectively about their work
- Self-evaluate their professional work

Assessment Weighting: Satisfactory (pass) grade will be given only to students who complete all of the following requirements:
Ten hours of classroom observation
Fifteen hours of volunteer teaching
Journal

MODULE DESCRIPTION

Practicum I: Seminar/Observation/Teaching Practice

	Reflective paper Statement of teaching philosophy Self-evaluation
Essential Reading:	Not applicable
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Contemporary Culture and Language Education

Full Module Title:	Contemporary Culture and Language Education
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	2nd cycle FQ-EHEA and 2nd FQHE-BiH
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	None
Co-requisites:	None
Access restrictions:	MA English Teaching Students
Assessment:	Participation 10% Essays (5) 50% Final paper and presentation 40%
Date validated:	n.s.

Module aims:

The aims of this module are to

- Deepen and broaden knowledge of current cultural trends and issues, related to and affecting language education
- Demonstrate the multi-faceted nature of a single culture or language-community
- Give students a more nuanced understanding of how culture and identity shape a language learner's attitudes, abilities, and motivations
- Highlight the importance of a multi-cultural society

Learning outcomes:

On successful completion of this module, students will be able to:

- Effectively work as language educators within a multicultural setting/classroom
- Identify "culturally motivated" learner difficulties and effectively develop strategies to resolve them
- Respectfully, though assertively, engage in discussion, debate and concise expression of opinions and ideas
- Productively, and respectfully, work as part of a team in various and multicultural settings

MODULE DESCRIPTION
Contemporary Culture and Language Education

Indicative syllabus content:	The module will include readings from the texts listed below. These readings focus on various elements of culture and language teaching, including: learner differences, regional language variations, dialects, non-standard English, Pidgins and Creoles. The content of the module will also include student presentations based on research projects dealing with topics related to language and culture.
Learning delivery:	Group work and class discussion will be the primary means of skills transfer. Student presentations constitute another mode of learning delivery. Individual work, in conjunction with the professor, in preparation for the final paper and presentation are also important modes of learning delivery.
Assessment Rationale:	Biweekly short essays will ensure that students are up-to-date with the readings and ongoing assignments. The final essay will require students to conduct independent research about a topic related to language and culture that is of particular interest to them. Because class discussions are an important element of the course's learning delivery, active participation will be assessed as well.
Assessment Criteria:	Students should be able to: • Work effectively in groups • Write short and extended analyses based on research and personal reflections • Assess professional situations based on theoretical knowledge • Apply theoretical knowledge to practical, professional settings • Actively and articulately participate in discussions related to the subject field
Assessment Weighting:	Active Class Participation 10% Essays (5) 50% Final paper and presentation 40%
Essential Reading:	Clark, Virginia P, et al. *Language: Readings in Language and Culture.* Boston: Bedford/St Martin's Press, 1998. Ur, Penny. *A Course in Language Teaching: Practice and Theory.* Cambridge: Cambridge University Press, 2004. Gass, Susan & Selinker, L. *Second Language Acquisition: An Introductory Course.* Mahwah, NJ: Lawrence Erlbaum Associates, 2001.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
Practicum II: Classroom Teaching

Full Module Title:	Practicum II: Classroom Teaching
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5
Length:	one semester
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	Practicum I
Co-requisites:	Contemporary English 10
Access restrictions:	MA English Teaching Students
Assessment:	Pass/fail. In order to receive a pass grade, students must complete all of the following requirements: X hours of classroom teaching Field experience portfolio Design three assignment sheets
Date validated:	n.s.

Module aims:

The aims of this module are to

- Give students experience in applying their theoretical, philosophical and research background into real classroom encounters
- Encourage students to continue to reflect on their work
- Expand students' confidence as teachers

Learning outcomes:

On successful completion of this module, students will be able to:

- Demonstrate the practical application in the classroom of theories studied during their MA program
- Compare the merits of various methodologies and articulate which ones are best suited to their own teaching style and situation
- Reflect on their experiences clearly through reflection, research, and practical experience
- Understand and complete the steps necessary to prepare for classes and assess and evaluate student work

MODULE DESCRIPTION
Practicum II: Classroom Teaching

	• Demonstrate a practical knowledge of pedagogical issues through classroom teaching
Indicative syllabus content:	As with Practicum I, the content of this module will be primarily independent work in classrooms. Supplementary research will be required in order to complete the final portfolio, again based on the student's individual focus and needs. Students will need to create lesson plans and instructional activities, which will require background readings and analysis.
Learning delivery:	The primary learning method of this course is practical, hands-on teaching experience. Individual reflective writing and creation of classroom materials will be another important element of learning in this course.
Assessment Rationale:	In addition to required hours of participation in their assigned classrooms, this course asks students to continuously and intensively reflect on their experiences and to connect these reflections to their earlier coursework in this MA program. Because of the personal, individual, and reflective nature of the writing for this course, it will be graded simply as satisfactory (pass) or unsatisfactory (fail).
Assessment Criteria:	Students should be able to: • Work independently in a professional setting • Self-evaluate practical work based on professional and theoretical knowledge • Reflect on their experiences in writing • Independently design and implement professional projects
Assessment Weighting:	Pass/fail. In order to receive a pass grade, students must complete all of the following requirements: X hours of classroom teaching Field experience portfolio Design three assignment sheets
Essential Reading:	n.s.
Intranet web reference:	n.s.
Validation date:	n.s.

MODULE DESCRIPTION
MA Thesis

Full Module Title:	MA Thesis
Short Module Title:	n.s.
Module Code:	n.s.
Module Level/BiH cycle:	FQ-BiH and Bologna 2nd Cycle
ECTS credit value:	5
Length:	one or two semesters
School:	n.s.
Department:	n.s.
Module leader:	n.s.
Email:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core
Pre-requisites:	n.s.
Co-requisites:	Contemporary English 10
Access restrictions:	MA Teaching English Students
Assessment:	Minimum 45 page research paper Oral defense/presentation
Date validated:	n.s.

Module aims:

The aims of this module are to

- Deepen knowledge of a specific subject in the field of language education
- Develop ability to conduct independent research
- Further discussion and investigation of existing issues/problems in the field of language education
- Support students in producing a significant scholarly piece of writing

Learning outcomes:

On the successful completion of this module, students will be able to:

- Efficiently work as independent researchers
- Identify existing issues in the field of language education and clearly articulate their own views on them
- Write an extended research paper in English analyzing their research and expressing their opinions
- Clearly and articulately present research in a public setting

Indicative syllabus content:

To be determined by student, mentor, and other committee members.

Learning delivery:

Learning for this module will be "delivered" primarily independently, on the part of the student, in the form of

MODULE DESCRIPTION MA Thesis	
	independent research, with guidance given by the mentor and committee members. Students should meet with the mentor at least twice for the duration of the course (though more frequent meetings would of course benefit the quality of the work).
Assessment Rationale:	Students will be assessed by the mentor and the thesis committee on both the quality of the written work and the oral presentation/defense. Students will not be able to succeed in this final assessment without diligent independent work and contact with their mentor.
Assessment Criteria:	Students should be able to: • Design, plan, and execute an extended independent research project • Synthesize and analyze significant amounts of information • Write clearly at a professional level
Assessment Weighting:	Pass Students will be graded on a pass/fail basis. In order to pass, students must successfully complete their final paper and defend this paper in a public discussion. The mentor and other committee members will decide if the student has acquired sufficient knowledge of the subject area and analytical skills, and if he/she has successfully shared that knowledge in written and oral forms.
Essential Reading:	To be determined by the candidate and committee members:
Intranet web reference:	n.s.
Validation date:	n.s.

ANNEX VIII

CASE STUDY 3
ECONOMICS WORKING GROUP

EXAMPLE CURRICULUM
BA IN ECONOMICS; FIELD OF SPECIALISATION: MARKETING

This document was developed by a team of subject experts in the course of a joint exercise of 9 BiH universities under the joint EC/CoE project "Strengthening Higher Education in BiH" (2009-2011).

Due to time and resource restrictions it was not possible to produce a full set of modules that encompasses complete qualifications.

It is an illustrative example, demonstrates approaches and solutions for defining learning outcomes, including transferable skills, the employability agenda, student-centred learning, varied assessments, etc. and is designed as a resource for those responsible for staff development and academics in curriculum development teams.

QUALIFICATION HANDBOOK
BA in Economics; Field of Specialisation: Marketing

Faculty name	
Name of the programme	
Academic degree	
Study cycle	1st cycle FQ-EHEA and 1st FQHE-BiH
Language of study	
Estimated length of the study	
Programme leader/head of department	
e-mail	
Web	

1 Introduction to the Discipline and Qualification

Successful companies nowadays have a strong focus and commitment to marketing. This does not only apply to big companies, but also small ones, domestic and global, profit or non-profit organizations. Creating customer value and satisfaction is at the heart of modern marketing theory and practice. Marketing is not only selling and advertising - marketing combines many activities: market research, product development, distribution, pricing, advertising, personal selling and others. Marketing is considered to be much more than an isolated business function - it is a philosophy that guides the entire organization.

Due to high importance of marketing in companies there is a need for people who will be educated and skilled to cover certain phases of marketing process. BA in Economics with specialization in Marketing offers students an opportunity to learn skills that will enable them to work inside the marketing department on implementation of marketing decisions. This degree should enable them to learn key marketing principles and methods and how to apply them in companies as well as how to gather and interpret data for marketing decisions. This qualification is also a good foundation for master studies in Marketing.

2 Rationale Statement

BA in Economics with field of specialization in Marketing prepares students for an entry level position in marketing and sales. The program will provide students with knowledge of economic concepts and firm organization and management. Students will learn about marketing research process and interpreting results of research as well as conducting fundamental activities in marketing mix of a firm such as product development, pricing, distribution or advertisement.

Students who complete these studies could work in marketing departments of firms on implementation of marketing decisions. They can work in production oriented as well as service offering firms, specialized marketing firms and agencies as well as state agencies at various marketing tasks. B&H firms today face many challenges in domestic and foreign markets and mostly do their business as medium and small size enterprises. This program should also enable students to recognize specific features of B&H firms and adjust to those.

The first part of the cycle (the first four semesters) offers general knowledge of Economics after which students can specialize in different fields. During those semesters students learn key economic principles, how to analyze the environment in which a firm operates focusing on business environment in B&H and learn principles of business decision making. The second part of this cycle (also lasting four semesters) mostly deals with elements of marketing mix and their characteristics. It also offers students knowledge of marketing research process, use of IT in marketing as well as other specific forms of marketing. The students will also have a chance to do a one-month internship in the sixth semester.

3 Overall Qualification Learning Outcomes

After successful completion of this qualification students will be able to:

- Define and explain key economic concepts and theories.
- Identify economic, legislative, competitive, regional, cultural and international context in which an organization operates.
- Apply basic quantitative methods important for business decision making.
- Identify and describe the role of marketing in organizational structure and a strategy of a firm.
- Explain marketing research process and gather and interpret marketing research data.
- Recognize and analyze determinants of consumer behaviour.
- Analyze, organize and modify elements of marketing mix of a firm.

4 Structure of the Qualification

1st Cycle Degree: BA in Economics; Field of Specialisation: Marketing; 240 ECTS (4 years; 8 semester; 39 modules)

4.1 List of core and subject specific option modules

Core modules + Support modules (12 modules)

Module code	Module
1MAR511	Introduction to Economics
1MAR512	Introduction to Management *
1MAR513	Mathematics for Economists
1MAR514	Business Informatics
1MAR516	Macroeconomics
1MAR517	Introduction to Marketing *
1MAR518	Financial Accounting *
1MAR519	Statistics
1MAR521	Microeconomics
1MAR522	Public Finance
1MAR523	Financial Management
1MAR526	Business (Corporate) Law

Specific modules (13 modules)

Module code	Module
1MAR515	Entrepreneurship
1MAR520	Business Organisation
1MAR524	Strategic Management
1MAR525	Operations Management *
1MAR527	Marketing Management
1MAR528	International Economics
1MAR529	Managerial Accounting *
1MAR530	Managerial Economics
1MAR616	Project Management
1MAR621	Marketing Information System
1MAR622	Quality Management
1MAR623	International Management
1MAR624	Human Resources Management

Specialist modules (6 modules)

Module code	Module
1MAR611	Market Research
1MAR612	Marketing Communication
1MAR613	Marketing (Distribution) Channels
1MAR614	Marketing Project
1MAR615	Customer Behaviour
1MAR617	Internship

Elective/Option modules (8 of 12 modules)

Module code	Module
1MAR651	Product Management
1MAR652	Price Management
1MAR653	Direct Marketing
1MAR654	Internet Marketing *
1MAR655	Business Analysis
1FIN661	Financial Market and Institutions
1MAR661	Marketing of Innovations
1MAR662	Marketing of Business Market
1MAR663	E-business
1MAR664	Risk Management
1MAR665	Industry Marketing
1MAR666	Marketing Decision Making Methods and Models
	Free choice module**

*module description included
**Module from other university/faculty study programmes

4.2 Explanation of module relationships

(Diagram showing programme structure is at pages 163)
The program is structured through modules in that way that student learns key economic concepts and then move to specialized modules that enable specific knowledge. During the first four semesters students will take mostly core and specific modules. Core modules offer students knowledge in microeconomics, macroeconomics, management and other key economic concepts and through specific modules students will broaden their knowledge of those key economic concepts. Details on pre-requisites for each module are in module documents. Specialisation in Marketing starts from the fifth semester with a

variety of specialist modules covering different aspects of Marketing. From the fifth semester students will also be able to take some elective courses and they are allowed to take two elective courses per semester starting from the fifth. Elective courses offer students specialisation in different fields of Marketing or certain aspects of marketing mix of a firm. Students can also choose a module from other faculty or study program.

4.3 Free-choice module information

In the sixth and the eighth semester students can choose free choice module as one of the elective courses. That can be a module from any other study program, faculty or other University. Students are free to choose a module that will enable them skills they can preferably combine with their economic or marketing skills that will be of use to them. Details of possible free choice modules and acceptable institutions will be published at the beginning of each academic year.

4.4 Progression routes within the qualification

The modules students take in the first four semesters will enable them understanding of key economic concepts, strategies, and provide them with skills of analyzing and observing economic phenomena and problems using quantitative methods. Later on in the following semesters the students will be able to learn more on marketing concepts as well as analyzing, interpreting and communicating, coordinating, solving problems etc.

The University will create exchange programs so that student's can take modules other than one offered at their home institution.

Specific value to the program is internship. Students should also be able to do internship in some of the local firms.[1]

Students must gain 240 ECTS credits and pass all core modules and appropriate numbers of specialist and elective modules for the award of the degree.

[1] A special problem, an important one for economics student, is work practice. However, in this document it is planned for the sixth semester without any specific details. Members of the working group think that it is very important issue but when it comes to implementing that process there are many problems. With a large number of students it is difficult to find an adequate practice for all of them. Even if the firms were found, there is still a need to carefully design the work and assessment of practice work. The practice has shown to be inefficient very often. Therefore in the future there is a need for a better cooperation between academic community and firms. Through joint work what firms need and what university needs in this process can be discovered and a program that would suit firms and universities could be designed.

Programme structure

Type	ECTS	Hours	1. year
	30		**1. semester**
M	a_1[2]	75	Introduction to Economics
M	a_2	75	Introduction to Management *
M	a_3	75	Mathematics for Economists
M	a_4	75	Business Informatics
M	a_5	75	Entrepreneurship
	30		**2. semester**
M	a_6	75	Macroeconomics
M	a_7	75	Introduction to Marketing *
M	a_8	75	Financial Accounting *
M	a_9	75	Statistics *
M	a_{10}	75	Business Organisation

*module description included

Type	ECTS	Hours	2. year
	30		**3. semester**
M	b_1	75	Microeconomics
M	b_2	75	Public Finance
M	b_3	75	Financial Management
M	b_4	75	Strategic Management
M	b_5	75	Operations Management *
	30		**4. semester**
M	b_6	75	Business (Corporate) Law
M	b_7	75	Marketing Management
M	b_8	75	International Economics
M	b_9	75	Managerial Accounting
M	b_{10}	75	Managerial Economics

*module description included

[2] The total number of ECTS points had been put for each semester. For individual modules only variables have been used to indicate that the module carries certain number of ECTS points. (Therefore the sum of variables in each semester should be 30; for instance the sum of a_1 to a_5 should be 30). It is up to the governing bodies of universities to decide on the appropriate way of ECTS points' distribution.

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Type	ECTS	Hours	3. year
	30		**5. semester**
M	c_1	75	Market Research
M	c_2	75	Marketing Communication
M	c_3	75	Marketing (Distribution) Channels
E	c_4	75	Elective Course 1
E	c_5	75	Elective Course 2
	30		**6. semester**
M	c_6	75	Marketing Project
M	c_7	75	Customer Behaviour
E	c_8	75	Project Management
E	c_9	75	Elective Course 3
E	c_{10}	75	Elective Course 4
M	c_{11}	75	Internship

Type	ECTS	Hours	4. year
	30		**7. semester**
M	d_1	75	Marketing Information System
M	d_2	75	Quality Management
E	d_3	75	Elective Course 5
E	d_4	75	Elective Course 6
	30		**8. semester**
M	d_5	75	International Management
M	d_6	75	Human Resources Management
E	d_7	75	Elective Course 7
E	d_7	75	Elective Course 8

Elective Courses

Semester	Course	Module
V	Elective Course 1	Product Management
	Elective Course 2	Price Management
		Direct Marketing
		Internet Marketing *
VI	Elective Course 3	Business Analysis
		Financial Market and Institutions
	Elective Course 4	Free choice module*
VII	Elective Course 5	Marketing of Innovations
	Elective Course 6	Marketing of Business Market
		E-business
		Risk Management
VIII	Elective Course 7	Industry Marketing
		Marketing Decision Making Methods and Models
	Elective Course 8	Free choice module **

* module description included

** Module from other university/faculty study programmes

5 University regulations

Not specifically mentioned

6 Specific qualifications regulations

Access to the studies of the first cycle and to the study program BA in Marketing have all persons who have completed four years of high school in Bosnia and Herzegovina (in further texts: BiH) as well as students who have validated high school certificate from abroad.[3]

[3] All universities in B&H admit students to undergraduate studies based on a fact what kind of high school education they have. Although Bologna does not recognize these kinds of limitations, members of the working group have decided to keep the current practice of admittance to universities in this document.

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After fourth semester students choose the field of Economics they wish to specialize in. In order to be able to get into the next year of studying the following will be applied:

- to enter second year of studying a student must have at least 48 ECTS
- to enter third year of studying a student must have at least 108 ECTS
- to enter fourth year of studying a student must have at least 168 ECTS.

Besides that a student cannot take a particular subject unless he/she has passed prerequisite for a particular subject. Detailed list of prerequisites is given with each module template.

7 Admission criteria

Candidate, who is registering to the studies of the first cycle, takes an entrance examination or test for checking preferences and abilities.

Order of the candidates, who are registering to the studies of the first cycle, is determined based on the overall success achieved in secondary education and the results achieved in the entrance exam or in the test for checking preferences and abilities.

For candidates, who are registering to the studies of the first cycle, the following documentation is required:

- Diploma on completion of high school
- Certificates on completion of high school
- Birth Certificate
- Certificate of citizenship

8 Teaching & Learning delivery statement

Students should be encouraged to explore and analyze information and consider economics implications. A variety of approaches in economics and marketing to manage the teaching and learning process will be adopted to achieve this.
The teaching and Learning delivery include:

- lectures,
- discussions,
- group work,
- workshops,
- peer teaching and learning (presentation),
- seminar papers
- case studies
- projects.

Lectures, seminar papers and in some cases peer teaching and presentations will mostly be used in the first few semesters while later on the emphasis will be put on discussions, workshops, group work, projects along with peer teaching and learning.

9 Assessment rationale

Assessment strategies (techniques) are designed to match intended learning outcomes. A variety of assessment techniques will be employed, including:

- end of module exam (unannounced and announced examinations),
- multiple choice tests,
- written essays,
- oral presentations,
- problem-solving exercises,
- case studies,
- project work.

In the first few semesters end of module exam, multiple choice tests and written essays will mostly be used as a way of assessing students. From forth or in some cases fifth semester those will be accompanied by oral presentations, problem-solving exercises and later with case studies and project work.

10 Generic assessment criteria

In assessing students' work, all of the following generic criteria will be adopted.

- Use and knowledge of appropriate literature.
- How far have students focused on questions asked and identified key problems?
- How good is the quality of written and oral explanation?
- How well have students demonstrated consistency, coherence and purposeful analysis?
- How well have students collected, processed, analyzed and interpreted relevant data?
- How successfully have students used evidence?
- How successfully have students applied relevant theory?

11 Learning resources

Not specifically mentioned

12 Employability and transferable skills

Students will have to use variety of resources to prepare for an exam, do their research, interpret data, work together in a team, analyze different situations, present their work to others and possibly observe marketing department in a firm and that will give them a good basis for their future employment in marketing.

Through modern teaching methods that include solving quantitative problems, case studies, presentations, different marketing projects, internship and many other methods students will be able to gain skills that will be of great importance to potential employer(s). Besides general financial, quantitative and management skills student will be able to organize, coordinate, use results of marketing research, solve problems of sales, cope with work on different marketing projects, team work in marketing department and marketing planning. Students will also be able to develop abilities to express their professional opinions and effectively cooperate with others.

Through many different activities during the course of studying, some of them mentioned above, they will be able to develop their set of self management skills, learning skills, communication and teamwork skills, problem solving skills as well as necessary IT skills.

13 Student support

There is a special service at the Faculty - Students service, an office that will deal with students' requests, enrolment, registering for an exam, giving appropriate certificates etc.

The Faculty also offers student an opportunity to participate in decision making through their representatives in Faculty Council.

Student will also be able to communicate with head of departments for any issues.

Centre for development of carrier will enable students to improve further gained skills and get a chance to find a job.

14 Linkages to external reference points*

Matrix linking first cycle economics program to FQ-BiH DESCRIPTORS

Core modules (1st sem.)	1MAR511 Introduction to Economics	1MAR512 Introduction to Management	1MAR513 Mathematics for Economists	1MAR514 Business Informatics
Specific modules (1st sem.)	1MAR515 Entrepreneurship			
Core modules (2nd sem.)	1MAR516 Macroeconomics	1MAR517 Introduction to Marketing	1MAR518 Financial Accounting	1MAR519 Statistics
Specific modules (2nd sem.)	1MAR520 Business Organisation			
Core modules (3rd sem.)	1MAR521 Microeconomics	1MAR522 Public Finance	1MAR523 Financial Management	
Specific modules (3rd sem.)	1MAR524 Strategic Management	1MAR525 Operation Management		
Core modules (4th sem.)	1MAR526 Business Law			
Specific modules (4th sem.)	1MAR527 Marketing Management	1MAR528 International Economics	1MAR529 Managerial Accounting	1MAR530 Managerial Economics
Specialist modules (5th sem.)	1MAR611 Market Research		1MAR613 Marketing (Distribution) Channels	
Elective modules (5th sem.)	1MAR651 Product Management	1MAR652 Price Management	1MAR653 Direct Marketing	1MAR654 Internet Marketing
Specialist/specific modules (6th sem.)	1MAR614 Marketing Project	1MAR615 Customer Behaviour	1MAR616 Project Management	1MAR617 Internship
Elective modules (6th sem.)	1MAR655 Business Analysis	1FIN651 Financial Market and Institutions	Free choice module	
Specific modules (7th sem.)	1MAR621 Marketing Information System	1MAR622 Quality Management		
Elective modules (7th sem.)	1MAR661 Marketing of Innovations	1MAR662 Marketing of Business Market	1MAR663 E-business	1MAR664 Risk Management
Specific modules (8th sem.)	1MAR623 International Management	1MAR624 Human Resources Management		
Elective modules (8th sem.)	1MAR665 Industry Marketing	1MAR666 Marketing Decision Making Methods and Models	Free choice module	

Diagram: 1st Cycle Degree: BA Marketing 240 ECTS

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EXTERNAL REFERENCE POINTS	MODULE CODES															
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the FIRST CYCLE (180-240 ECT credits)	1MAR511	1MAR512	1MAR513	1MAR514	1MAR516	1MAR517	1MAR518	1MAR519	1MAR521	1MAR522	1MAR523	1MAR526	1MAR515	1MAR520	1MAR524	1MAR525
have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study		X					X							X	X	
can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study		X					X							X	X	X
have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues		X													X	X
can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem															X	
can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non-specialised audiences for given area of science																X
have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources		X												X	X	
possess a foundation for future self-directed and lifelong learning;		X					X							X	X	
have acquired interpersonal and teamwork skills appropriate to employment and/or further study		X												X	X	X

EXTERNAL REFERENCE POINTS	MODULE CODES														
BiH Qualifications Framework descriptors for qualifications that signify the successful completion of the FIRST CYCLE (180-240 ECT credits)	1MAR527	1MAR528	1MAR529	1MAR530	1MAR616	1MAR621	1MAR622	1MAR623	1MAR624	1MAR611	1MAR612	1MAR613	1MAR614	1MAR615	1MAR617
have demonstrated knowledge and understanding in a field of study that builds upon their secondary education, and is typically at a level that, whilst supported by appropriate learning resources (texts and information communication technologies), includes some aspects that will be informed by knowledge of the forefront of their field of study									X						
can apply the thorough knowledge and critical understanding of principles relating to the field of study/discipline in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study									X						
have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues															
can apply the main methods for acquiring knowledge and undertaking applicative research in the given discipline, and are able to decide on the approach to be taken for solving a given problem and are aware of the extent to which the selected approach is suitable for solving the problem									X						
can communicate using appropriate language (and where appropriate foreign language[s]), communication technologies, information, ideas, problems and solutions to both specialised and non-specialised audiences for given area of science															
have developed the necessary learning skills to undertake further study with a high degree of autonomy and academic skills and attributes necessary to undertake research, comprehend and evaluate new information, concepts and evidence from a range of sources									X						
possess a foundation for future self-directed and lifelong learning;									X						
have acquired interpersonal and teamwork skills appropriate to employment and/or further study									X						

MODULE DESCRIPTION
Introduction to management

SHORT MODULE DETAILS

Full Module Title:	Introduction to Management
Short Module Title:	n.s.
Module Code:	1MAR512
Module Level/BiH cycle:	First Cycle BiH QF and first cycle FQ-EHEA
ECTS credit value:	6
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact Details:	n.s.
Site:	n.s.
Host Course:	n.s.
Module status (core/option):	Core module of the 1st semester
Pre-requisites:	Passed module on Introduction to Marketing
Co-requisites:	none
Access restrictions:	students enrolled in the 1st semester (and on course)
Assessment:	announced knowledge testing
Date validated:	n.s.

Module aims:

The aim of this course is to introduce students to basic concepts in management, business environment, the basic elements of ethical and social responsibility of managers and firms, managerial skills, planning, basic elements of decision making, organizational structure, economic relations and organizational management in a company, human resource management, leadership, motivation, compensation management, interpersonal relationships, controlling, quality management.

Learning outcomes:

On successful completion of this module the student will be able to:

- Analysis of environmental businesses
- Participation in the development plans in businesses and in creating the strategy and its implementation
- Make a constructive contribution to the decision-making process
- Knowledge of the Comprehend and evaluate the organization of a company, taking part in the development of the organization

MODULE DESCRIPTION
Introduction to management

- Display knowledge of the basic elements of human resource management
- Analysis and apply practical and theoretical skills of leadership and motivation
- Apply knowledge and basic techniques associated with control systems in quality management

Indicative syllabus content: definition of management and managers, business environment, ethics and social responsibility, the concept, importance and content of planning, vision , mission and goals, concept, components and levels of strategy, concept and process of strategic management, the level of strategy, basic of business decision-making, the concept and organizing content, concept and content design of organizational structure, concept and content of economic relations, organization management, basic of human resource management, leadership, motivation, Interpersonal processes in the enterprise, the concept and importance of control, process control, control systems, measure the performance, the concept and importance of control and quality management methods and techniques of control.

Learning delivery: The methods include:

- Ex cathedra lectures
- Case study
- Presentation and analysis of specific business situation
- Projects and seminar works writing
- Guest lecturers

Assessment Rationale: Knowledge testing is continued during semester. Taking an exam is conducted through 2 announced tests, making of seminar work, discussions and presentation, and problem solving.

Assessment Weighting: Assessment will be based on following activities:

- Test 1 35%
- Test 2 35%
- Case study - Group work 5%
- Presentations actual themes 5%
- Participation in discussions 5%
- Seminar work 10%
- Problem solving - team work 5%

Essential Reading: n.s.

Intranet web reference: n.s.

MODULE DESCRIPTION
Financial accounting

SHORT MODULE DETAILS

Full module title:	Financial accounting
Module code:	1MAR518
Module level/cycle BiH:	First Cycle BiH QF and first cycle FQ-EHEA
ECTS credit value:	5
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact details:	n.s.
Web page:	n.s.
Host course:	Core module
Module status (basic/optional):	Basic module in second semester
Pre-requisites:	-
Access restriction:	students enrolled in the 2nd semester (and on course)
Assessment:	announced knowledge testing and practise
Date validated:	n.s.

Module aims:

The aim of the course is to introduce student to basic accounting terms; basic accounting principles; financial recognition and measurement; accounting of financial results.

Learning outcomes:

Upon successful completion of this module student will be able/capable to:

- Identify basic accounting terms
- Booking the basic business event in corporation
- Identify the impact of economic event of gross and net assets of corporation
- Classify on accurate way the basic accounting category
- Evaluate the periodic results applying different methods
- Evaluate financial results/balance sheets

Indicative syllabus content:

Includes: double-entry accounting; accounting category; the instruments of book keeping; preclude booking; recognition and measurements of assets, liabilities, capital, revenue and expense; account of results; special business; business of markets; the analysis of financial results

MODULE DESCRIPTION
Financial accounting

Learning delivery:
- Ex cathedra lectures
- Workshop
- Exercises
- Presentation and analysis of specific business situation

Assessment Rationale: Knowledge testing is continued during semester. There are three tests lasting 90 minutes. Students' discussions during lectures and practise are kept record.

Assessment Weighting: Test 1 25% Participation in discussions 5%
Test 2 25% Verbal presentation 20%
Test 3 25%1. godine

Essential Reading: Škarić-Jovanović Kata; Finansijsko računovodstvo; Ekonomski fakultet Beograd, Beograd 2010. godine
Gray/Needles; Finansijsko računovodstvo; Savez računovođa i revizora Republike Srpske; Banja Luka 2007. godineač;

Intranet web reference: n.s.

Addition:

Description of lectures in financial accounting	Lecture 1	Basic and principles of double enter accounting; definition and tasks of accounting; accounting doctrines
	Lecture 2	Impact of economic events on companies assets; separation of balances on accounts
	Lecture 3	Global procedure in accounting; inventory, balance sheet, documentation, evidences in booking; income statements
	Lecture 4	Principles of accurate booking, errors in booking, account framework
	Lecture 5	Engage of assets in corporation; shareholders equity and debts
	Lecture 6	Acquisition of long term assets
	Lecture 7	Acquisition of material and commodity; paying to supplier
	Lecture 8	Definition and classification of expenses and expenditures; methods of amortizations,
	Lecture 9	Expenses of material, plant and packaging, LIFO; FIFIO; average price
	Lecture 10	Expenses of production services Expenses of non production services Expenses of salary
	Lecture 11	Acquisition value of selling commodity; financial expenses, Other expenses
	Lecture 12	Definition, measurement, classification and booking of revenue
	Lecture 13	Preclose booking and closure of accounts
	Lecture 14	Account of periodical results by aggregate expenses method and expense selling products method
	Lecture 15	Allocate of periodical results; special events in corporation

MODULE DESCRIPTION
Introduction to Marketing

SHORT MODULE DETAILS

Full module title:	Introduction to Marketing
Module code:	1MAR517
Module level/cycle BiH:	First cycle FQ-EHEA and first FQHE-BiH
ECTS credit value:	6
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact details:	n.s.
Web page:	n.s.
Host course:	Core module
Module status (basic/optional):	Basic module of the 2nd semester
Pre-requisites:	none
Access restrictions:	students enrolled in the 2nd semester (and on course)
Assessment:	announced knowledge testing
Date validated:	n.s.

Module aims:

The aim of course is to get the students introduced to basic marketing terms, as well as with instruments of market situations' analysis, institutional particularities of marketing, importance of its application in economy, organisation and control, as well as with particularities of marketing sector.

Learning outcomes:

upon successful completion of this module a student will be able/capable to:

- Recognise and solve simple marketing problems
- Apply basic skills in basic techniques of market exploration
- Have basic knowledge of elements of marketing mix
- Be familiar with basics of marketing activities planning
- Identify and apply alternative marketing strategies
- Identify and apply specificity of marketing application in special areas

Indicative syllabus content:

marketing concept, historical development of marketing and market orientation of a company, importance of marketing application in economy,

MODULE DESCRIPTION
Introduction to Marketing

marketing environment, planning of marketing activities, ethics in marketing, marketing strategy, market exploration, consumers' behaviour, marketing segmentation, selection of target markets and positioning, product, price, distribution and sales, promotion, organising, application, evaluation and control of marketing activities, application of marketing in special areas

Learning delivery:

- Ex cathedra lectures
- Case study
- Presentation and analysis of specific business situation
- Projects and seminar works writing
- Guest lecturers

Assessment Rationale:

Knowledge testing is continued during semester. Taking an exam is conducted through 3 announced tests lasting 45 minutes, make of seminar work, discussions and presentation.

Assessment Weighting:

Test 1 25% Presentations 5%
Test 2 25% Participation in discussions 5%
Test 3 25% Seminar work 15%

Essential Reading:

- Grupa autora (2007) *Marketing*, Ekonomski fakultet, Sveučilište u Mostaru, Mostar,
- Kotler, Ph. et al. (2006) *Osnove marketinga,* Četvrto europsko izdanje, Mate, Zagreb
- Kotler, Ph., Keller, K.L. (2008) *Upravljanje marketingom*, 12.izd., Mate, Zagreb
- Grupa autora (2006) *Osnovi marketinga,* Ekonomski fakultet Sarajevo, Sarajevo
- Kotler, Ph., Armostrong, G. (2006), *Principles of marketing* 11th ed., Pearson Prentice Hall
- Kotler, Philip; Keller, Kevin Lane (2006) *Marketing Management*, Mate, Zagreb

Intranet web reference:

n.s.

MODULE DESCRIPTION
Statistics

SHORT MODULE DETAILS

Full module title:	Statistics
Module code:	1MAR529
Module level/cycle BiH:	First Cycle BiH QF and first cycle FQ-EHEA
ECTS credit value:	6
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact details:	n.s.
Web page:	n.s.
Host course:	Basic module of the 2nd semester
Module status (basic/optional):	Basic module of the 2nd semester
Pre-requisites:	Mathematics
Conditions:	none
Access restrictions:	n.s.
Assessment:	n.s.
Date validated:	n.s.

Module aims:

- to introduce students to elements of statistical analysis
- to prepare students for implementation of statistical methods
- to introduce students to work processes in which are used statistical methods

Learning outcomes:

upon successful completion of this module a student will be able/capable to:

- Perform statistical observations and data collection
- To make statistical arrangement, processing and data presentation
- To select and implement appropriate models and methods for practical problem solving
- To interpret statistical analysis results
- To give a critical comment of selected models and to analyze their results
- To test and check a hypothesis

Indicative syllabus content:

Statistical researches (plan, processing and presentation of statistical data), numerical indicators of the characteristics of a statistical set, statistical structures,

MODULE DESCRIPTION
Statistics

variability concentration distributions, probability and probability distribution, statistical analysis based on a sample, statistical hypothesis testing, linear correlation analysis, dynamic phenomenon analysis.

Learning delivery:
- Ex cathedra lectures
- Discussion
- Problem solving
- Presentation
- Seminar work
- Practical studies case study

Assessment Rationale: Knowledge testing is continued during semester, monitoring work and knowledge of students during semester, as well as in final exam.

Assessment Weighting: Test 1 - 25% Homework - 10%
Test 2 - 25% Project surveys - 10%
Participation in discussions 5% Final exam - 25%

Essential Reading:
- Dragović V., Osnovi statistike, Zavod za udžbenike i nastavna sredstva Istočno Sarajevo, 2007.
- Žižić M., Lovrić M., Pavličić D., Metodi statističke analize, EF Beograd, 2002.

Intranet web references: www.statsoft.com

Addition:

Description of lectures in Statistics	Lecture 1	Basic statistical terms, research methods and significance of statistics
	Lecture 2	Statistical system (domestic and international) and publications
	Lecture 3	Statistical research: plan. plan, processing and presentation of statistical data
	Lecture 4	Numerical indicators of the characteristics of a statistical set (parameters) - shape of the distribution
	Lecture 5	Statistical structures and concentration structure
	Lecture 6	Combinations, probability and probability distribution
	Lecture 7	Statistical analysis based on a sample
	Lecture 8	Statistical hypothesis testing
	Lecture 9	Analysis of variance
	Lecture 10	Non-parametrical testing
	Lecture 11	Regression and correlation analysis: linear and nonlinear regression and correlation
	Lecture 12	Multiple linear regression and correlation and partial correlation
	Lecture 13	Dynamic analysis
	Lecture 14	Trend: linear, parabolic, exponential
	Lecture 15	Cyclical and seasonal variation

MODULE DESCRIPTION
Operations management

SHORT MODULE DETAILS

Full module title:	Operations management
Module code:	1MAR525
Module level/cycle BiH:	n.s.
ECTS credit value:	6
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact details:	(not applicable)
Web page:	(not applicable)
Host course:	n.s.
Module status (basic/optional):	Basic module of the 3rd semester
Pre-requisites:	none
Conditions:	none
Access restriction:	students enrolled in the 3rd semester (and on course)
Assessment:	announced knowledge testing
Date validated:	n.s.

Module aims:

The aim of course is to introduce students to the basic operations management terms, as well as to instruments of operations process analysis, cross-functional particularities of decision making, importance of the operations function, organisation and control of quality, as well as with particularities of operations sector.

Learning outcomes:

Upon successful completion of this module a student will be able/capable to:

- Recognise and solve simple operations problems
- Have basic skills in basic techniques of operations process analysis
- Have basic knowledge of elements of operations strategy
- Be familiar with basics of operations activities planning
- Be familiar with application of basic inventory control models
- Be familiar with specificity of operations process in special areas

MODULE DESCRIPTION
Operations management

Indicative syllabus content:	operations management concept, historical development of operations management, importance of operations function in company, operations strategy model, new-product development process, quality control and planning process, design of quality control systems, product-process strategy, service process design, technology and society, process thinking, layout of facilities, facilities strategy, aggregate planning, scheduling operations, inventory management, materials requirements planning, just in time production, management of the workforce, globalization of operations
Learning delivery:	• Ex cathedra lectures • Case studies • Presentation and analysis of specific business situation • Projects and seminar works writing • Guest lecturers
Assessment Rationale:	Knowledge testing is continued during semester. Taking an exam is conducted through 3 announced tests lasting an hour and thirty minutes, make of seminar work, discussions and presentation.
Assessment Weighting:	Test 1 25% Presentations 5% Test 2 25% Participation in discussions 5% Test 3 25% Seminar work 15%
Essentail Reading:	Schroeder R. G., *Upravljanje proizvodnjom*, MATE, Zagreb, 1999. Heizer J., Render B., *Operations management (8/E)*, Prentice Hall, 2005. Hatunić O., *Upravljanje proizvodnjom*, CORSA, Tuzla, 2002.
Intranet web references:	n.s.

MODULE DESCRIPTION
Operations management

Addition:

Description of lectures in operations management	Lecture 1	Introduction into operations management operations management concept, operations function, history of operations management, contemporary operations themes
	Lecture 2	Operations strategy operations strategy definition, operations strategy model, focused operations
	Lecture 3	Product design strategies for new-product introduction, new-product development process and technology, modular design, value analysis
	Lecture 4	Quality management customer satisfaction, policy and strategy of quality, costs of quality, Malcolm Baldrige Award, design of quality control systems, statistical quality control, quality control of process, continuous improvement
	Lecture 5	Process selection product-flow characteristics, process selection decisions, vertical integration
	Lecture 6	Service process design defining service, customer contact, service matrix, operations service system
	Lecture 7	Technology selection technology and society, computer-aided manufacturing, computer-assisted design
	Lecture 8	Process-flow analysis flowchart analysis, materials-flow and information-flow analysis, modelling process flaws
	Lecture 9	Layout of facilities
	Lecture 10	Facilities decisions facilities strategy, problem of location of facilities
	Lecture 11	Aggregate planning costs of aggregate planning, basic strategies, mathematical models
	Lecture 12	Scheduling operations Gantt charting, input-output control, planning and control systems
	Lecture 13	Inventory management purpose of inventories, inventory cost structures, economic order quantity, periodic and continuous review system, definitions of MRP systems, MRP elements, just in time philosophy, kanban system, application of just in time
	Lecture 14	Management of workforce workforce management objectives, job design, company productivity
	Lecture 15	Globalization of operations global strategy, transfer of technology, world-class manufacturing

MODULE DESCRIPTION
Internet Marketing

SHORT MODULE DETAILS

Full module title:	Internet Marketing
Module code:	1MAR654
Module level/cycle BiH:	First Cycle BiH QF and first cycle FQ-EHEA
ECTS credit value:	6
Length:	15 weeks
Faculty/School/Department:	n.s.
Module leader:	n.s.
Contact details:	n.s.
Web page:	n.s.
Host course:	n.s.
Module status (basic/optional):	Optional module (5th sem.)
Pre-requisites:	Passed module on Introduction to Marketing
Access restriction:	students enrolled in the semester (and on course)
Assessment:	announced knowledge testing
Date validated:	n.s.

Module aims:

The main aim of this module is to extend marketing knowledge from the area of Internet marketing application. The students get acquainted with basic terms of virtual electronic market, as well as with specificities of technology, techniques of marketing application on cyber market. This module points out planning of activities and selection of Internet marketing strategy, as well as control of marketing activities. Through stimulation of individual work (seminar works writing and project make) students develop skills that will enable them to harmonize marketing activities on Internet with already acquired knowledge of traditional marketing activities. During module lectures workshops are organized, practical cases are analysed and lectures by eminent experts from this area are organized.

Learning outcomes:

upon successful completion of this module a student will be able/capable to:

- recognise and solve simple Internet marketing problems,
- exercise basic techniques of e-market exploration,
- exercise elements of marketing mix on e-market

MODULE DESCRIPTION
Operations management

with the emphasis on understanding of characteristics of promotional activities on the Internet and measure their efficiency,
- know basics of marketing activities planning,
- plan activities of the Internet marketing, as well as to conduct strategy and control of marketing activities on the Internet,
- know specificities of e-marketing application on business markets in BiH

Indicative syllabus content:

Introduction to Internet marketing, The notion of the Internet, Internet marketing environment, The Internet as a part of marketing information system, Behaviour of e-consumers, The Internet and product as a part of 4 P's: characteristics of products and services on cyber market, Influence of the Internet on manner and specificities of product pricing, pricing of Internet contents, Specificities of distribution and sales on the Internet, e-commerce, influence of Internet on logistics, characteristics of paying system on the Internet, Characteristics of promotional activities on the Internet and measurement of efficiency, banner advertisements, sponsorships, affiliate programmes, application of e-mail in promotion, virus marketing, problems with spam, Internet marketing activities planning, Strategy and control of marketing activities on the Internet, Business markets and the Internet

Learning delivery:

- Ex cathedra lectures
- Case study
- Presentation and analysis of specific business situation
- Projects and seminar works writing
- Guest lecturers

Assessment rationale:

Knowledge testing is continued during semester. Taking an exam is conducted through 3 announced tests lasting 45 minutes, make of seminar work, discussions and presentation.

Assessment weighting:

Test 1 25%	Presentations 5%
Test 2 25%	Participation in discussions 5%
Test 3 25%	Seminar work 15%

Essential Reading: n.s.
Intranet web references: n.s.

ANNEX IX

FINAL CONCLUSIONS / RECOMMENDATIONS FROM THE PILOTING EXERCISE

Issued by the subject experts that were piloting the Framework for Higher Education Qualifications in BiH; at their 6th plenary meeting on 19 the June 2010 in Sarajevo.

Implementing the BiH Framework for Higher Education Qualifications

Final Conclusions / Recommendations from the Piloting Exercise

I The curriculum example outcomes of the project are presented in the form of common qualification and module templates. These are produced by discipline-based groups of BiH academics for illustrative purposes only. They are not intended to be imposed on institutions. Every BiH higher education institution should produce, and be responsible for, its own unique study programmes that reflect their expertise and local context. The Bologna process values diversity and academic autonomy. Obviously, institutions may well wish to make use of some parts of what has been reproduced.

II The Framework of Higher Education Qualifications (HE-QF) in BiH has benefits for both curriculum developers and quality assurance purposes. However, it has limited use on its own. Curriculum developers and QA personnel also need to consult sectoral (Tuning) statements /benchmark statements (subject specific indicators) and other external reference points (foreign qualifications frameworks). More detailed level descriptors help academic staff to build in progression over 3-4 year first cycle and 1-2 year second cycle studies. The HE-QF in BiH is useful to help establish the broad standards for qualifications in the three Bologna cycles but it is generic in nature and needs to be supplemented with other appropriate reference aids.

III The good practice advice document 'Guidance *on the use and acquisition* of academic titles in Bosnia and Herzegovina'' needs to be implemented.

It complements the HE-QF in BiH and should be integrated with national quality assurance developments and the existing implementation plan for the HE-QF in BiH.

There is a need to implement intensive staff development on writing learning outcomes at institutional level for all academic staff and those with quality assurance responsibilities. Without detailed (measurable) national and institutional academic reform strategies, progress toward Bologna self-certification and implementation of the 'Standards and Guidelines for Quality Assurance in Higher Education in BiH' is <u>not</u> possible. The various political roadblocks problems will prevent meaningful reform and international recognition of reformed BiH qualifications will not happen.

IV The role of the BiH quality assurance agency (HEA) is crucial. The HEA should be encouraged to adopt the curriculum development templates[1] (as a format) developed and tested by the three pilot working groups as part of this project.

The Qualifications Template and the Module Template (as a format for presenting information) developed by the project should be adopted by all BiH higher education institutions and endorsed by the QA agency.

V Staff involved in the project should form the basis of a core group to help reform all BiH HE programs - they are a trained, well informed, proven group. Their expertise needs to be recognised and they should be an important part of any national and institutional strategy for HE reform.

VI Consortium developments should be encouraged and discipline-based teams from across the country should meet regularly. Existing BiH HEI are hard-pressed and under resourced. National, inter-institutional subject teams should be created to work cooperatively on exchanging best practice, and ideas associated with new approaches to the curricula.

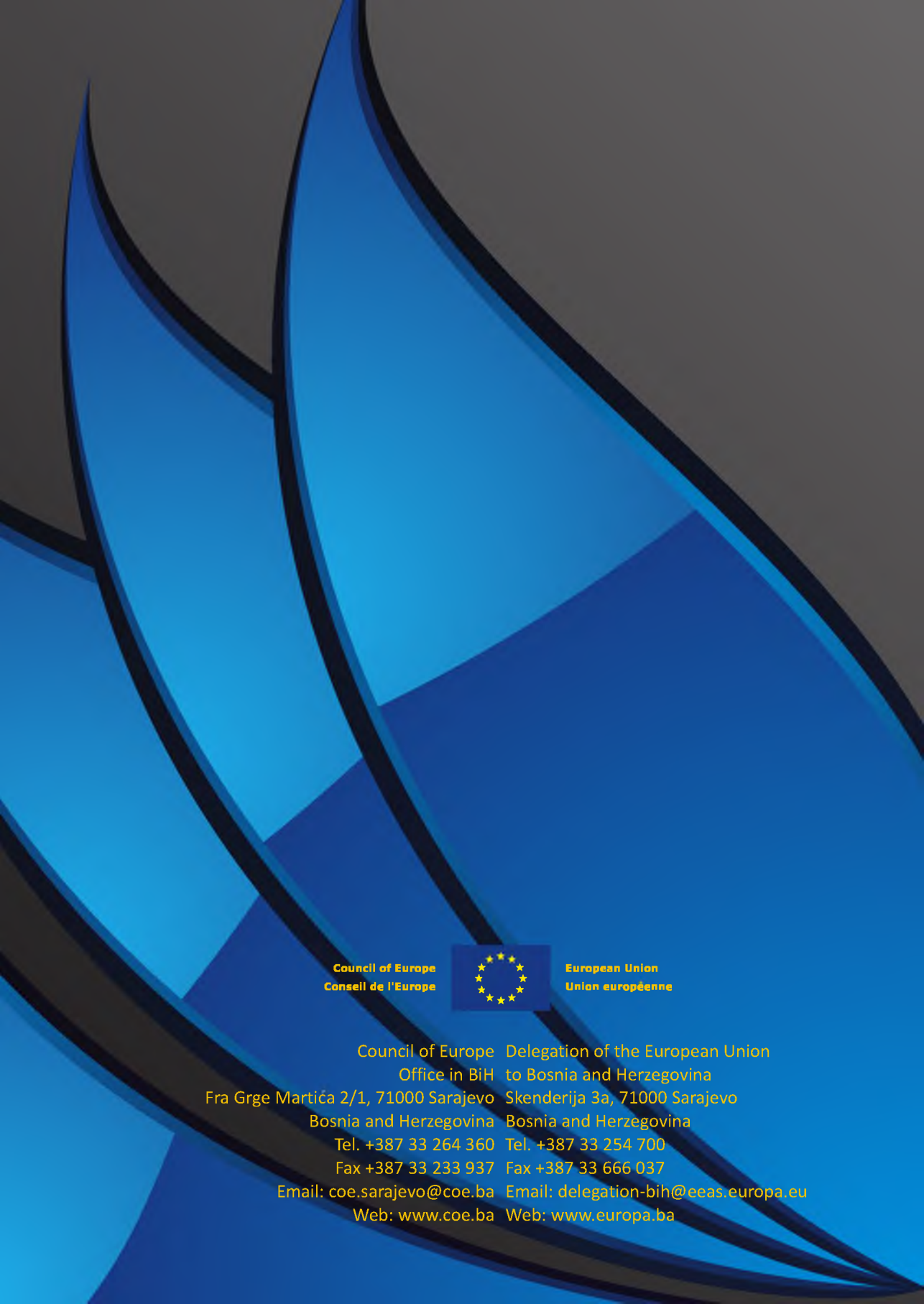
In addition, subject groups constituted for the whole country (in the light of no other body or mechanism undertaking this task) should seek to agree binding new subject-based conventions associated with 3 and 4 year first cycle degrees and 1 and 2 year second cycle degrees and rules for the designation of science or arts, and joint (combined studies) degrees.

VII It should be recognized that there are strong links between qualifications framework elements, quality assurance and recognition and that an integrated higher education implementation strategy is required for them all that also fits with EQF developments.

VIII There should be a legislative review of the Framework Law on Higher Education, other national laws that impact on higher education, together with appropriate lower level laws to clarify responsibilities and ensure consistency with the Bologna Communiqués.

Issued by the subject experts that were piloting
the Framework for Higher Education Qualifications in BiH;
at their 6th plenary meeting on 19 the June 2010 in Sarajevo

[1] The curriculum development templates = the blank/uncompleted Qualifications Template and the Module Template, see annex I and II



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