Guidelines on estimating / calculating notional hours for modules

1. Introduction and background

The Senate Tuition and Learner Support and Community Engagement Committee, in their meeting on 19 June 2017, nominated Prof OE Mashile to co-ordinate a task team to compile a draft document on Notional Hours circulated to all stakeholders for input and thereafter ratification at the August / September sitting of the STLCEC. This recommendation from STLCEC stems from the discourse around the complexities involved in calculating / estimating notional hours and its impact on student experience, throughput, retention and graduateness. Furthermore, the CHE evaluation of some Unisa programmes highlighted challenges in the way notional hours are estimated/calculated and allocated for particular programmes submitted for approval and accreditation.

In this draft document, guidelines on how to estimate notional hours for the core activities at the module level based on the "average student" are provided.

We further accept that the guidelines provided may be adapted by respective Colleges to suit their specific disciplines within their programmes and its module offerings.

2. HEQSF and credits

In South Africa, the National Qualification Framework (NQF) and now the HEQSF has adopted the concept of a credit (at times referred to as credit points or credit weighting) as an indicator of the volume of teaching and learning (*Higher Education Qualifications Sub – Framework,* 2013: 6).

Credit is fundamentally a tool for describing the comparability of learning achieved in terms of its volume and also intellectual demand. If used properly it can be used to design modules/programmes which are similar in volume and intellectual demand accross different disciplines and contexts. Hence, "Credit" is used during the design of programmes to indicate how much learning is expected to be undertaken.

In most qualifications the challenge is around the determination of the volume of learning in order to achieve the intended outcomes. The amount (volume) of teaching and learning allocated to each qualification and programme can be expected to have an impact on the throughput and success rate, therefore reasonable and accurate estimation of notional hours is crucial to improve student success at Unisa.

3. Determining workload

In determining workload, the following attributes ought to be considered:

a) The credit allocation for the module
b) Whether the module is a semester or year module
c) A 12 credit yearlong module does not mean that the student is expected to spend more than 120 notional hours in the year of offering.
d) The Unisa semester on average consist of 12-14 weeks
e) The Unisa year on average consists of 32 weeks (up to end of September)
f) The following core activities must be taken into account:
    - 20% of the notional hours must be allocated to formative / continuous assessment
    - The duration of the summative assessment must be taken into account, i.e. venue based examinations, portfolio submission, projects
    - Work-based learning, site-based work, integrated learning
    - Practicals
    - Teaching Practice
    - eTutor support
    - Real-time lecturing (face-to-face, live online)
    - Reading – average of 10 pages per hour
    - Listening – video clips; podcasts, etc.
    - Internet-based activities
    - Links to open educational resources

4. Notional hours

Notional hours are defined in terms of the amount of time it takes the average student to achieve the learning outcomes (SAQA: 1998). Estimating / calculating notional hours must be approached from the students' perspective. This means that, instead of looking at how much content needs to be taught, thinking is informed by how much time it takes the average student to achieve deep learning of the knowledge, skills, attitudes and values that are embodied in a particular module.

SAQA's formulation acknowledges that it is impossible to treat all students equally, hence the concept of the 'average student'. Students vary in innate abilities, background, educational achievements, etc. Each student will thus spend a different amount of time on a module but should be encouraged to move at a pace that meets the lecturer's expectations of the amount of work that should be completed by a certain stage of the module. Luckett (1998:6) points out "there is a wide range in the number of hours that different students study for the same course…and that there is

little correlation between the number of hours studied and achievement. However the informed estimate of 10 hours per module per week … does not seem unrealistic".

Planning and estimation in respect of a semester versus a year system will be different. It makes sense that the average student will most probably not spend 120 notional hours on a twelve-credit module in a semester system if the way the learning facilitation and assessment was planned does not oblige him/ her to do so.

According to the HEQSF (2013: 15) workload is conceptualised in respect of full-time students. "An average full-time equivalent student is expected to study for a 40-hour week, thus requiring a minimum credit-load of 120 credits per academic year for Certificates, Diplomas and Bachelor's Degrees and 180 credits per academic year for Master's Degrees and Doctorates." As far as undergraduate study is concerned, a 40-hour week translates into enrolment for 5 x 12 credit modules in a semester context, or enrolment for 5 x 24 credit year modules.

5. Steps in estimating workload and notional hours for a module

STEP 1: CALCULATE THE REQUIRED STUDY TIME FOR THE MODULE

- Identify the number of credits allocated for the module, i.e. 12 credit semester module, 12 credit year module, 24 credit year module, 36 credit year module or 48 credit year module, 120 credit year module.
- Identify the mode of delivery for the module, i.e. print, blended or fully online
- Identify the delivery time (Semester or year) [see approved Module form]
- Calculate the number of weeks students will have available and the number of hours per week needed for a twelve-credit module with 120 notional hours of work for the average student.

  Consider: The number of weeks available per semester at Unisa does not always make life easy for students. For the first semester, for instance, a student might only enroll on the last day of registration and therefore have about twelve weeks for a twelve-credit module. That means a commitment of ten hours a week for a 12-credit module between the beginning of February and the end of April. For a 24-credit year module, students might have 32 weeks (February to September inclusive) and therefore would need to work on their studies for a much more manageable 8 hours a week.

STEP 2: IDENTIFY ALL THE REQUIRED AND POTENTIAL ACTIVITIES FOR THE MODULE

List all possible activities the student must complete:

- Reading (study guide, textbook, articles, extracts, internet sources e.g. via hyperlinks, etc.)
- Learning activity tasks (exercises, reflection, practice, peer collaborative)

- Self-assessment activities (from the guide, textbook and online)
- Listening – podcasts, videos, video clips
- Attending lectures (face-to-face, live online, recorded, video conferencing, group discussions)
- Viewing - podcasts, videos, video clips
- E-tutorial support (planned student-e-tutor interactions which is part of core learning)
- Assessed discussion forum postings
- Assessed blog postings
- Formative tasks, service learning, assignments
- Interviews with counsellors for study or career guidance, online forums, etc...

STEP 3: CALCULATE / ESTIMATE THE WORKLOAD OF THE MODULE

Suggested tool for calculating the workload for a blended module of 12 credits or 120 notional hours

What follows is a list of (potential) activities for a blended module, as an example. The assumption is that for the majority of students English will be an additional language.

Blended module – 12 credits

Activities	**Estimated student time in hours**
Reading and comprehending study guide / learning units [approx. 150 pages], including note-taking (average of ten pages an hour)	15
Prescribed reading through hyperlinks [120 pages] (journal article, book chapter, etc- including note-taking (average of ten pages an hour)	12
Reading and comprehending Tutorial Letter 101 of 50 pages (average of ten pages an hour)	5
Completing activities in the guide and reading feedback to activities in each study unit / learning unit	15
Completing self-assessments in the guide / learning unit and reading feedback to these assessments	10
eTutor support for activities, questions, clarifications	12
Completing two assignments (5 hours to produce 200 words, half on reading): (Nadeosa benchmark 15% of notional hours on formative assessment = eighteen hours)	18

• Reading • Drafting and revision • Writing / typing final copy	
Reading and comprehending other tutorial letters	8
Non-reading activities: Listening / viewing video / podcasts	1
Participating in three online discussion forum topics (four substantial contributions per forum = two hours per topic plus reading others' contributions = two hours per topic = total of twelve)	10
Peer collaborative learning (for example group work, commenting on peer discussion forum postings, blog postings, etc.)	5
Study/ career counselling	1
Practical/ laboratory work/ service learning	8
Revision	5
Examination	2
TOTAL	127

NB: The example provided above adds up to 127 notional hours. There is no prescription on maximum notional hours. SAQA only refers to a minimum of 120 notional hours for an average student, enrolled for a 12-credit module. We can therefore exercise flexibility within reason when calculating / estimating notional hours for a 12-credit module. For example, 140 notional hours for a 12-credit module may be extreme, unless this is how much time a below average student will require to achieve the module outcomes.

STEP 4: CONDUCT DEVELOPMENTAL TESTING

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In this step, academics are advised to complete the activities themselves to test the accuracy and reliability of the notional hour estimation / calculation. When this is done, consideration should be given to research findings showing that the average reading rate of Unisa students is approximately 100 words per minute, with a comprehension rate of 40,4 percent, which necessitates re-reading. Secondly, a focus group of students can be used to test accuracy and reliability of the notional hour estimation / calculation.

Suggested tool for calculating the workload for a fully online module of 24 credits or 240 notional hours

Activities	**Estimated student time in hours**
Orientation to the module and the tools on myUnisa, FAQs, Schedule information, announcements, welcome page	10
Engaging with learning units. Learning includes reading of module information plus accessing all available links that are part of core learning, including quizzes, video, non-myUnisa based self-assessments and myUnisa-based self-assessments (Samigo), viewing podcasts and screencasts, etc. Total reading may add up to 300 pages (= 30 hours); note-taking and comprehension adds to time spent (= 40 hours); viewing, taking notes, reading feedback and comprehension (= 40 hours).	110
eTutor support in respect of activities, questions, clarifications [If less than 200 students, the academic assumes the role of eTutor]	40
Completing 4 - 10 assignments of varying weight (use norm of 5 hours to produce 200 words and keep in mind that in an online environment assessment may not entail much writing at all) • Reading • Drafting and revision • Writing/ typing final copy • Repeated attempts if allowed, e.g. Samigo self-assessments **And / Or** Portfolio	40
Participating in ten myUnisa based activities and interaction with peers, e.g. Discussion forum, wiki or blog posts, (ten substantial contributions = one hour preparation per topic plus reading others' contributions = two hours per topic)	20
Revision	20
Examination [this will not apply if non-venue based exam is selected]	3
TOTAL	243

6. REFERENCES

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SAQA. 2010. Level Descriptors for the South African National Qualification Framework. http://www.saqa.org.za (Accessed on 02 March 2011)

CHE. 2013. The Higher Education Quialifications Sub-Framework.

APPENIDX A

What we do below is to first divide the module into assignments, and assignment an amount of time to each assignment. Then we take this blocks of time and break it down according to the 10 step unit. The principle is that we work with is that the work done for a particular weight of marks should as far as possible be the same.
The 24 credit module requires 240 notional hours of work. We assumed that students would need 10 hours to orient themselves, work through unit 0, and get to know the basic tools that we are using. We also assumed that a student would need 20 hours to put together the final portfolio (remember that most of the work for the portfolio was done throughout the year). This left 210 hours, which we then divide according to the weight of each assignment. The result is that step 1-8 of each unit should take about 21 hours, step 9-10 about 42 hours, and the project about 42 hours. The result if the following:

Assignment	Unit	Year mark weight	Hours
Orientation	0		10
1	1	10	21
2	2	30	63
3	3-7	30	63
4	3-7	10	21
5		20	42
6			20

One of the key assumptions is that we assume that a student can read and comprehend about 10 pages per hour. This does not include going back and rereading as you start writing. We include the time needed to reread in order to write under the activities' time. This is obviously a huge assumption, but we base this on the document on "determining workload in

relation to credits and notional hours". There the calculations lead to 7.5 pages per hour for first year students, we assumed that we could lift this to 10 pages for Honours students. Now, with the 63 hours for a full unit, which give 21 hours for the smaller introduction and online engagement, and 42 hours for the in depth reading and research essay, we suggest the following:

Step	Time	Explanation
1	0.75 hours (45 minutes)	Reading the introductory text and perhaps watching a brief video. This isn't a long read.
2	2 hours	The first activity, which require a brief online engagement. The time include going back to the introductory text, reading some of the other students' comments, and writing your own.
3	0.75 hours	The second introductory text, again perhaps including a short video, and again not being very long.
4	3 hours	First blog post, where the assumption is that students need to read through earlier discussions, perhaps revisit some of the introductory texts, and then draft a 200 word response.
5	5 hours	This is the first reading moment, and for units only counting 10% the only reading moment. 5 hours reading is about 50 pages, so you might prescribe about 3 articles here.
6	3 hours	Second blog post, again assuming that students might want to go back to the first readings while drafting their response.
7	2 hours	The context subunit. This might include different kinds of activities, but we propose about 2 hours for this.
8	3 hours + 2 hours	The last blog post (3 hours) and commenting on the blog posts of others (2 hours).
9	20 hours	We arrived at the 20 hours by looking at what was left of the 42 hours after we've

		allowed time for the research essay. 20 hours imply that students can read about 200 pages, thus a medium book or 10 articles or so.
10	22 hours	We arrived at the 20 hours by assuming that a student will write an essay of about 3000 words, and that we should allow 1.5 hours for every 200 words. We assume that the writing process will also require going back and rereading sections of the work, or perhaps reading other things as you realize that you need to understand something better in order to write about it.

The result will be that students will need to read about 600 pages compulsory in the reading moments, plus the reading in the various introductions, watch a number of videos, and spend quite a lot of time reflecting and engaging. What is not included here is various other activities such as discussions on whatsapp or facebook, which we just assume to be "extra" but which obviously also constitute learning time.

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