

Tutorial Letter 101/0/2024

Ontology Engineering COS4840

Year module

Computer Science Department School of Computing

<p>CONTENTS</p>

<p>General information about COS4840</p>

CONTENTS

Page

1	INTRODUCTION	3
2	OVERVIEW OF COS4840.....	3
2.1	Purpose	3
2.2	Outcomes	3
3	CURRICULUM TRANSFORMATION	4
4	CONTACT DETAILS	4
4.1	Lecturer.....	4
4.2	Department	4
4.3	University	4
5	RESOURCES	4
5.1	Prescribed book(s) and materials	4
5.2	Recommended sources	5
5.3	Prescribed software	5
6	STUDENT SUPPORT SERVICES	5
6.1	<i>Study @ Unisa</i> brochure.....	5
6.2	First-Year Experience Programme @ Unisa	5
6.3	Library services and resources	6
7	HOW TO STUDY ONLINE	6
7.1	What does it mean to study fully online?	6
7.2	Joining myUnisa	6
7.3	myUnisa tools	7
8	ASSESSMENT	7
8.1	Assessment plan	7
8.2	Assessment weights	8
8.3	Assessment due dates	8
8.4	Submission of assessments	8
8.5	Tests	9
8.6	Supplementary and aegrotat examinations	10
9	ACADEMIC DISHONESTY	10
9.1	Plagiarism	10
9.2	Cheating	10
9.3	More information	10
10	STUDENTS WITH DISABILITY	10
11	IN CLOSING.....	11

1 INTRODUCTION

Dear Student

Welcome to Ontology Engineering (COS4840), where you will study what ontologies are (from a computer science perspective), and how to go about building them. We trust that you will find this module stimulating and interesting and wish you a successful year.

Because COS4840 is a fully online module, you will need to use myUnisa to study and complete the learning activities for this module. You are encouraged to log into the module site on myUnisa regularly (that is, at least twice per week): [COS4840-24-Y]. If you haven't done so for any of your other modules yet, you will have to register on myUnisa, as detailed in Section 7.2 below. Please also activate your myLife email account, also explained in Section 7.2. Note that the University will use your myLife email account to contact you, and we will also use it to send you important updates to material in COS4840. It may be a good idea to set up forwarding of emails sent to your myLife account to your primary email account or some other account that you access regularly.

Do not hesitate to contact us (by email or telephone; the details are on the home page of the COS4840 Ontology Engineering myUnisa site) if you are experiencing problems with the content of this tutorial letter or any aspect of the module. We sincerely hope that you find this module, as well as your online learning experience, interesting and rewarding and trust that you will complete the module successfully.

We wish you every success with your studies!

2 OVERVIEW OF COS4840

2.1 Purpose

The purpose of this module is to provide an overview of ontologies, their uses, their languages, and the tools and techniques (methodologies) for developing and debugging them. Qualifying students will have a basic knowledge of ontology engineering and an understanding of its principles. Students will be able to critically analyse and evaluate existing ontologies according to these principles, and be able to apply appropriate techniques to develop, update or adapt simple ontologies. This module forms part of the BSc Honours in Computing degree.

2.2 Outcomes

After completing this module, you should be able to:

- Demonstrate an understanding of ontologies and their uses
- Critically analyse and evaluate existing ontologies
- Demonstrate an understanding of techniques and methodologies for developing ontologies
- Use ontology development tools to develop new ontologies and adapt existing ones

3 CURRICULUM TRANSFORMATION

Unisa has implemented a transformation charter, in terms of which the university has placed curriculum transformation high on the teaching and learning agenda. Curriculum transformation includes student-centred scholarship, the pedagogical renewal of teaching and assessment practices, the scholarship of teaching and learning, and the infusion of African epistemologies and philosophies. All of these will be phased in at both programme and module levels, and as a result of this you will notice changes in the teaching and learning strategies implemented by Unisa, together with the way in which the content is conceptualised in your modules. We encourage you to embrace these changes during your studies at Unisa in a responsive way within the framework of transformation.

4 CONTACT DETAILS

4.1 Lecturer

You are welcome to contact the COS4840 lecturer. The name and contact details of the lecturer are provided on the COS4840 site on myUnisa.

When you contact lecturers, please remember to include your student number and module code. This will help the lecturers to assist you.

4.2 Department

Should you have difficulty in contacting your lecturer, you may phone the general number of the School of Computing. Your message will then be conveyed to the relevant lecturer. Remember to provide your student number together with the relevant module code. You can contact the Department of Computer Science as follows:

Telephone number: 011 670 9200

E-mail: computing@unisa.ac.za

4.3 University

Contact addresses of the various administrative departments appear on the Unisa website: <http://www.unisa.ac.za/sites/corporate/default/Contact-us/Student-enquiries>.

Please include your student number in all correspondence.

5 RESOURCES

5.1 Prescribed book(s) and materials

The prescribed material for COS4840 is:

- Keet, C.M. (2020). *An Introduction to Ontology Engineering*.
- DeBellis, M. (2021). *A Practical Guide to Building OWL Ontologies Using Protégé 5.5 and Plugins*

You do not need to purchase these as they are open educational resources and will be made available on the COS4840 website on myUnisa under Additional Resources.

5.2 Recommended sources

Further recommended sources, which can be used as a starting point for further reading, can be found in the Additional Resources folder of the COS4840 website on myUnisa.

5.3 Prescribed software

Details of the prescribed software, Protégé, can be found in the details for Learning unit 2 on myUnisa. This software is open-source, which you are free to download and install under the relevant open-source license.

6 STUDENT SUPPORT SERVICES

6.1 Study @ Unisa brochure

The *Study @ Unisa* brochure is available on the following webpages of myUnisa:

www.unisa.ac.za/brochures/studies

This website has tips and information to help you succeed in your studies at Unisa.

If you need assistance with regards to the myModules system, you are welcome to use the following contact details:

- Toll-free landline: 0800 00 1870 (Select option 07 for myModules)
- E-mail: mymodule22@unisa.ac.za or myunisahelp@unisa.ac.za

You can access and view short videos on topics such as how to view your calendar, how to access module content, how to view announcements for modules, how to submit assignments and how to participate in forum activities on myUnisa.

6.2 First-Year Experience Programme @ Unisa

If this is your first year of study at Unisa, you will probably need some assistance in navigating the systems, methods and challenges of distance education. For this purpose, a First-Year Experience (FYE) programme has been designed to assist you. The web address of the FYE programme is <http://www.unisa.ac.za/FYE>.

6.3 Library services and resources

The Unisa Library offers a range of information services and resources:

- For brief information, go to <https://www.unisa.ac.za/library/libatglance>
- For more detailed library information, go to <http://www.unisa.ac.za/sites/corporate/default/Library>

7 HOW TO STUDY ONLINE

7.1 What does it mean to study fully online?

Studying fully online modules differs from studying some of your other modules at Unisa.

- **All your study material and learning activities for online modules are designed to be delivered online on myUnisa.**
- **All your assessments are done online.** This means that you will do all your assessed activities and submit all your assignments on myUnisa. In other words, you may **NOT** post your assignments to Unisa using the South African Post Office.
- **All communication between you and the University happens online.** Lecturers will communicate with you via e-mail and SMS, and use the **Announcements**, the **Discussion Forums** and the **Questions and Answers** tools. You can also use all of these platforms to ask questions and contact your lecturers.

7.2 Joining myUnisa

The myUnisa learning management system is the University's online campus which will help you communicate with your lecturers, other students, and the administrative departments within Unisa. To claim your myUnisa account, please follow the steps below:

1. Visit the myUnisa website at <https://my.unisa.ac.za/portal>
2. Click on the **"Claim Unisa login"** link on the top of the screen under the orange user ID box.
3. A new screen will load, prompting you to **enter your student number**. Please enter your student number and click **"continue"**.
4. Enter your surname, your full name, your date of birth and, finally, your South African ID number (for South African citizens) OR your passport number (for foreign students). Then click "continue". **Remember to enter either an ID number or a passport number, NOT both.**
5. Please read through the guidelines and **click all the check boxes** to acknowledge that you have read all the information provided. Once you are done, click the **"Acknowledge"** button to redirect you to the final page in the process.
6. The final page will display your myLife e-mail address, and your **myLife AND myUnisa password**. This password will also be sent to the cell phone number displayed on the page for safekeeping.
7. Please note that it can take up to 24 hours for your myLife e-mail account to be created.

Remember, the password provided is your myUnisa **AND** myLife password.

7.3 myUnisa tools

The main tool that we will use is the **Learning Units tool**. This tool provides the content of the module. Amongst other activities, the learning units will direct you to join discussions with fellow students and complete activities and assessments as you progress through the module.

It is very important that you log in to myUnisa regularly. We recommend that you log in at least once a week to do the following:

- **Check for new announcements.** You can also set your myLife e-mail account so that you receive the announcement e-mails on your cell phone.
- **Participate in the Discussion Forum.** You are encouraged to use the discussion forum to discuss aspects of the work with fellow students.
- **Use the Blogging forum.** For most of the learning units, you are required to post a blog entries on the blogging forum. Do not skip these blogging exercises because your entries will be evaluated and marks will be awarded for them.

These various ways of studying the material and doing the activities are intended to help you succeed in the module. To get the most out of the module, you **MUST** go online regularly to complete the activities and assessments on time.

8 ASSESSMENT

8.1 Assessment plan

Assessment is an activity which measures whether you have achieved the outcomes of a module.

COS4840 Ontology Engineering is a continuous assessment module. In other words:

1. All assessments count towards the final module mark for the year.
2. There is no formal exam, although two of the assessments are in the form of a practical and theory test.
3. There is also no supplementary exam (as there is no final exam). This means that if you are not successful, there is no retake of an exam, and you will have to repeat the whole year and redo all the assessments.

The following formal assessments make up the final mark:

- 2 theory assignments
- 1 practical assignment
- 1 formal test with both practical and theory components
- 1 blogging assessment

The practical and theory tests are compulsory. In other words, you will not pass the module if you do not complete them. The rest of the assessments are elective. In other words, you can pass the module without completing them, although they will count 0 towards your final mark.

8.2 Assessment weights

The table below sets out the weight that each assessment will carry towards the final module mark.

Assessment	Type	Weight
1	Theory assignment	15%
2	Theory assignment	20%
3	Practical assignment	25%
4	Theory test	15%
5	Practical test	15%
6	Blogging exercises	10%
Total		100%

8.3 Assessment due dates

- There are no due dates included in this tutorial letter.
- Assessment due dates are given in Tutorial Letter 102, available in Additional Resources of the COS4840 website.
- We recommend that you start working on the learning units as soon as you register for the module.

8.4 Submission of assessments

- When you access the COS4840 website on myUnisa, you will see a welcome message posted by your lecturer. Below the welcome message you will see the assessment shells for the assessments that you need to complete. Some assessments may be written assignments, other tests, some forum discussions, and so on. All assessments must be completed and submitted in the corresponding assessment shells.
- For each assessment, please see the corresponding assessment tutorial letter on how to complete the assessment. These tutorial letters will be made available closer to the due dates of the assessments, and will be uploaded to the corresponding assessment shells on myUnisa.
- For each of the written and practical assignments, please note the due date by which the assignment must be submitted. Ensure that you follow the guidelines to complete the assignments. Click on the submission button on the relevant assessment shell on the COS4840 website. You will then be able to upload your assignment. Before you finalise the upload, double check that you have selected the correct file for upload. Remember, no marks can be allocated for incorrectly submitted assignments.
- To complete the theory test, click on the relevant assessment shell. There will be a date on which the assessment will open for you. When the assessment is open, access the quiz online and complete it within the time available to you. Quiz questions are not included in a tutorial letter and are only available online. You must therefore access the quiz online and complete it online in the relevant assessment shell.

It is not advisable to use a cell phone to complete a quiz. Please rather use a desktop computer, tablet or laptop. Students who use a cell phone find it difficult to navigate the Quiz tool on the small screen and often struggle to navigate between questions and successfully complete the quizzes. In addition, cell phones are more vulnerable to dropped internet connections than other devices.

8.5 Tests

By a test, we mean a quiz or an activity that must be completed within a specified timespan. Invigilation is generally required for tests. Information and details about the format of the theory and practical tests for COS4840 will be made available to you online via the COS4840 website on myUnisa. Look out for information that will be shared with you by your lecturer and for communication from the university.

Invigilation/proctoring

Since 2020, Unisa has been conducting all its assessments online. Given stringent requirements from professional bodies and increased solicitations of Unisa's students by third parties to unlawfully assist them with the completion of assignments and examinations, the University is obliged to assure its assessment integrity through the utilisation of various proctoring tools: Turnitin, Moodle Proctoring, the Invigilator App and IRIS. These tools authenticate the student's identity and flag suspicious behaviour to assure credibility of students' responses during assessments. The description below is for your benefit as you may encounter any or all of these in your registered modules:

- **Turnitin** is a plagiarism software that facilitates checks for originality in students' submissions against internal and external sources. Turnitin assists in identifying academic fraud and ghost writing. Students are expected to submit typed responses for utilisation of the Turnitin software.
- The **Moodle Proctoring tool** is a facial recognition software that authenticates students' identity during their Quiz assessments. This tool requires access to a student's mobile or laptop camera. Students must ensure their camera is activated in their browser settings prior to their assessments.
- The **Invigilator** mobile application-based service does verification of the identity of an assessment participant. The Invigilator Mobile Application detects student dishonesty-by-proxy and ensures that the assessment participant is the registered student. This invigilation tool requires students to download the app from their Play Store (Google, Huawei and Apple) on their mobile devices (camera enabled) prior to their assessment.
- **IRIS** Invigilation software verifies the identity of a student during assessment and provides for both manual and automated facial verification. It has the ability to record and review a student's assessment session. It flags suspicious behaviour by the students for review by an academic administrator. IRIS software requires installation on students' laptop devices that are enabled with a webcam.

Students who are identified and flagged for suspicious dishonest behaviour arising from the invigilation and proctoring reports are referred to the disciplinary office for formal proceeding. Please refer to the module assessment information on the module site to determine which proctoring or invigilation tool will be utilised for which assessments.

8.6 Supplementary and aegrotat examinations

There are no supplementary or aegrotat examinations for COS4840.

9 ACADEMIC DISHONESTY

9.1 Plagiarism

Plagiarism is the act of taking the words, ideas and thoughts of others and presenting them as your own. It is a form of theft which involves several dishonest academic activities, such as the following:

- Cutting and pasting from any source without acknowledging the source.
- Not including or using incorrect references.
- Paraphrasing without acknowledging the original source of the information.

9.2 Cheating

Cheating includes, but is not limited to, the following:

- Completing assignments or assessment on behalf of another student, copying from another student during an assessment or allowing a student to copy from you.
- Using social media (e.g. WhatsApp, Telegram) or other platforms to disseminate assessment information.
- Submitting corrupt or irrelevant files.
- Buying completed answers from “tutors” or internet sites (contract cheating).

9.3 More information

More information about plagiarism can be obtained from

<https://www.unisa.ac.za/sites/myunisa/default/Study-@-Unisa/Student-values-and-rules>

10 STUDENTS WITH DISABILITY

The Advocacy and Resource Centre for Students with Disability (ARCSWiD) provides an opportunity for staff to interact with new and returning students with disabilities.

If you are a student with a disability and would like additional support or need additional time for assessments, you are invited to contact the lecturer to discuss the assistance that you need.

11 IN CLOSING

Do not hesitate to contact us by e-mail if you are experiencing problems with the content of this tutorial letter or with any academic aspect of the module.

We wish you a interesting and satisfying journey through the learning material, and trust that you will complete the module successfully.

Enjoy the journey!

COS4840 lecturer

© 2023
Unisa