



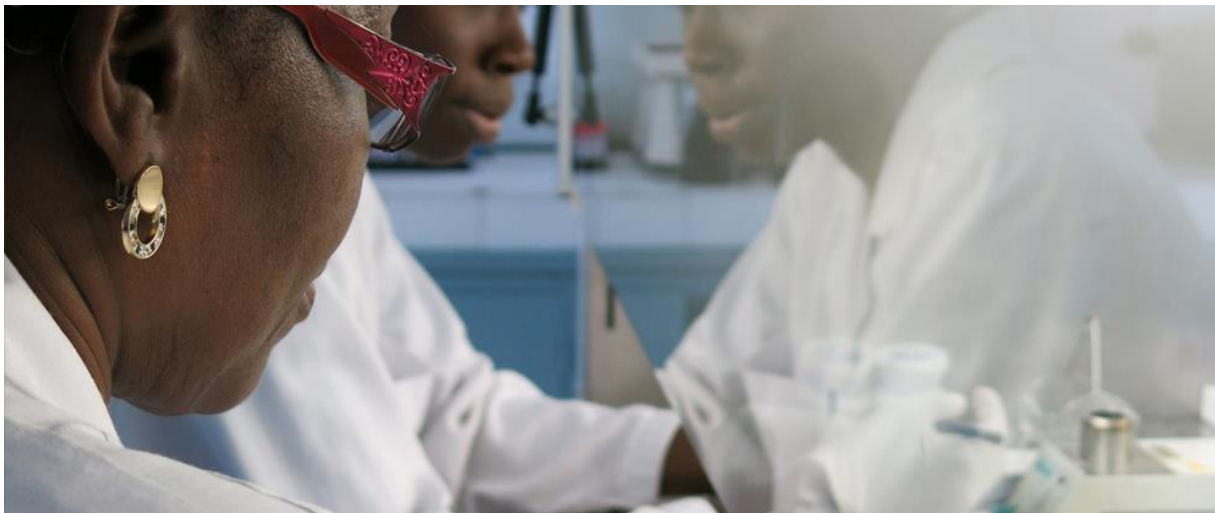
Short Course on
Clinical Decision-Making for Drug-Resistant Tuberculosis
2019-2020

STUDENT HANDBOOK

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Short Course:
“Clinical Decision-Making for Drug Resistant Tuberculosis”
(DR-TB)



Welcome to the short course
“Clinical Decision Making for Drug Resistant Tuberculosis”, in short DR TB.
This guide provides some essential information about the course and your stay at
ITM in Antwerp.
We wish you a wonderful and enriching time at our Institute!

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1 Introduction

Drug-resistant tuberculosis (DR-TB) is an important challenge for clinicians. With the introduction of molecular diagnostic tests, such as the Xpert MTB/RIF assay and Line Probe Assays, the notification of DR-TB is increasing and the time to diagnosis can be shortened, allowing earlier treatment initiation. Shorter treatment regimens (STR) of nine months duration are now also recommended by WHO, thus simplifying treatment for patients and National TB Programs alike. New and repurposed drugs, such as bedaquiline, delamanid, linezolid, and clofazimine, are increasingly available. Guidelines are being adapted frequently. Clinicians require training in the use of these new diagnostic tools, the interpretation of guidelines, and in making informed choices for treatment initiation and monitoring and in adequate and timely clinical decision making.

This blended course offers interdisciplinary and interactive training on clinical aspects of DR-TB diagnosis and care. It consists of a seven-week online training (8 hours/week) followed by ten days face-to-face.

The course is taught exclusively **in English**.

2 The course content

2.1 General learning objectives

TB clinicians improve clinical decision-making using locally available diagnostic tools and treatment options.

2.2 Specific objectives:

At the end of the course the student should be able to:

1. Define the problems with DRTB in their country in terms of occurrence, diagnosis and treatment, using available data;
2. Assess harm and benefit of clinical decisions in the field of DR-TB diagnosis and treatment;
3. Formulate contextualized evidence-based recommendations for the prevention, diagnosis and treatment of DR-TB for case studies from different contexts.

2.3 Programme

The course consists of an online and face-to-face (F2F) module. The F2F module is given at the ITM, Antwerp.

During the online module 7 different topics are being addressed. These topics are further developed during the F2F. Participants work on a case study during the online module. They present the case during the F2F and incorporate knowledge they have gained during the F2F lectures in their final presentation.

Table 2.3.1: Timeline and topics of the online module

| Online module | 8 weeks between 18/02/2019 and 28/04/2019 (including a 2-week break) |
|---------------|---|
| Week 1 | Introduction to the online course |
| Week 2 | Epidemiology; know your epidemic |
| Week 3 | Diagnosis 1; How to diagnose TB and rifampicin resistance |
| Week 4 | Diagnosis 2; How to diagnose resistance to other drugs |
| Week 5 | Clinical decision making 1; Measures of test performance |
| Week 6 | Treatment 1; DR-TB drugs and regimens |
| Week 7 | Treatment 2; DR-TB drugs and regimens in complex cases |
| Week 8 | Clinical decision making 2; Harm, benefit, threshold for making a decision which regimen to use |

Table 2.3.2: Timeline and topics of the face-to-face module

| Face-to-face module | 10 days between 13/05/2019 and 24/05/2019 |
|---------------------|---|
| Day 1 | Discuss case studies with teachers and adapt to fit oral presentation during one of the planned sessions Clinical epidemiology |
| Day 2 | Performance of diagnostic tests DST: definitions and concepts Sample transport Xpert MTB/RIF - interpretation Whole genome sequencing – indications |
| Day 3 | DST: interpretation, limitations and discordance Lab visit: phenotypic and molecular DST |
| Day 4 | Models of DR-TB care Principles of constructing a TB-regimen Thresholds in clinical decision-making |
| Day 5 | WHO MDR/RR-TB guideline 2019: interpretation Short treatment-regimen: indications, modifications, what if high resistance-prevalence MDR-TB programmes: model of care |
| Day 6 | Operational research Multiple core-drugs in one regimen: pro and con Surveillance of RMP resistance |
| Day 7 | Construct a standardize regimen (with core and add-on drugs): impact of initial resistance, practical experience New and repurposed TB-drugs |
| Day 8 | Adverse events of TB-drugs |
| Day 9 | Co-morbidities in MDR/RR TB patients Genotypic testing – epidemiological applications |

| | |
|---------------|---|
| | Pediatrics |
| Day 10 | Evaluation: Final presentations of case studies |

2.4 Teaching and learning methods

- Problem-based learning: During both the online and face to face part, case studies are used. As such, the learning experience fits as much as possible the problems experienced by participants in their programmatic setting. Moreover, face-to-face sessions often start with a case study presentation. Case studies are followed by an interactive debate between participants and experts. At the end of a session, the expert provides a lecture to complement the debate. As such the theory aligns well with the problems identified by participants.
- Flipped learning: During the online part course participants prepare for the face-to-face debates. Most of the theory will be digested at home, which allows students to use the precious class time for interaction with peers and experts. Participants have access to guidelines and other sources of evidence for consultation, and gaps in the evidence base are identified. In addition, challenges and achievements in diagnosing and treating DR TB, as experienced by the participants, are discussed. The two-week days face-to-face builds further on the content addressed during the online part, and includes group discussions, case presentations, summaries of key learning points by students, and interactive lectures (didactic lecturing accounts for 30% of the contact hours).
- Social constructivism: Course participants will construct their knowledge through debates with peers and experts, and group work.

2.5 Admission requirements

The course targets clinicians working in the field of DR_TB.

- Participants should be holders of a university degree in medicine (min. 4 years, e.g. should be a medical doctor) equivalent to 240 ECTS (referred to as a Master degree in the European Union).
- Proficiency in English is required. If your university studies were done in English: you are exempted of a language certificate. If this is not the case: an officially recognised proficiency language certificate is mandatory. Required level for English: TOEFL paper-based 580, computer-based 230, Internet-based 88 or IELTS 6.5 (ITM Toefl Code 7727).
- To participate in the online and the face-to-face course, access to a computer and internet connection is required. We strongly suggest to use Mozilla firefox or Google Chrome in order to access our website (Internet explorer is not 100% compliant).
- Only if you want to apply for a DGD scholarship: at least two years of professional experience is required. (Other requirements for the DGD scholarship: please check <http://www.itg.be/E/scholarships>).

2.6 Selection criteria

Candidates will be selected based on the following criteria:

- Active work experience in DR_TB care

- Previous attendance in DR_TB courses
- Profile as shown in the Curriculum Vitae
- Motivation letter (including a description of the challenges in DR TB care you are confronted with and the commitment from own home institution in supporting your application)
- Two reference letters (including a description of the applicant's involvement in DR TB care)
- A written description of a case study that shows challenges with diagnosis and/or the treatment of DR-TB

3 Student assessment

Six assignments are considered for the final score; 5 from the online module, one from the F2F module. Three additional assignments are not scored.

Table 2.2.1 Assignments included in the assessment

| | |
|--|--|
| Online assignment 1 (10 points) | Participants describe the DR-TB epidemic in their country, using indicators showing the DR-TB cascade. Maximum score if: all requested indicators were developed, the data are correctly interpreted and sources are mentioned |
| Online assignment 2 (10 points) | Participants describe and assess the DR-TB diagnostic tests and algorithms available in their setting. Maximum score if: the flow of tests is listed + 1) the level of care at which tests are performed (primary, secondary, tertiary); 2) turnaround time, by test; 3) strong points and challenges (own experience); 4) approaches to overcome challenges are mentioned |
| Online assignment 3 (10 points) | Participants peer review the diagnostic algorithms presented by another course participant. Maximum score if: the peer review is conducted + 1) feedback on what applies to his/her own context, 2) + feedback on a possible way forward for the context that is reviewed |
| Online assignment 4 (10 points) | Participants contribute to the online discussion on experiences with new drugs and regimens. Maximum score if: contributions are new, and evidence-based, or supported by program data |
| Online assignment 5 (10 points) | Participants do a quiz on the interpretation of Xpert MTB/RIF and DST results and indications for new drugs and regimens |
| Face-to-face assignment (50 points) | Participants present their case study Score of the jury is based on: <ul style="list-style-type: none"> • 1. Description of the clinical case and problem statement (concise, clear, use of table) • 2. Evaluation of the problem shown in the case study (clear, balance of harm & benefit of different options) • 3. Formulation of lessons learnt related to diagnostic tests and treatment used in the case study (clear, lesson learnt is correct, use of data /evidence) |

- 4. Formulation of recommendations for diagnostic tests and treatment for the future, considering lessons learnt from the course (clear, lesson learnt is correct, use of data /evidence)

5. Response to questions (clear, concise, correct, contextualized)

The face-to-face (F2F) module of the DR TB course builds further on the content of the online module. Therefore, active participation during the online module is key.

The minimum is to participate in 6 out of 7 discussions. Thus, participants should score at least one point for 6 discussions. Moreover, every week a new assignment will be explained. All (!) assignments need to be submitted. Two assignments will be related to the elaboration of a personal project, the case study on diagnosis and/or treatment of a DR-TB case (for which you submitted a subject during your application for this course).

Participants who don't participate during the online module are not allowed to join the F2F in Antwerp, because the F2F builds on the online module (and plane tickets may be cancelled). Luckily this is very rare, as usually participation is very active.

4 Course evaluation

A **formal written and oral evaluation** is organized at the end of the course. The participation to this formal evaluation is mandatory. The results of this evaluation are discussed with individual lecturers, and major problems or cross-cutting issues are dealt with in the steering group of this course.

Contacts with former participants are also a way to receive continuous feedback on the relevance of the programme. This can either be through informal e-mails or through a formal **alumni survey**. We may at times ask for your opinion on a certain change in the programme we are considering. Since 2019 we involve former participants as faculty during the online course.

As the core of the course faculty is very stable, lessons learnt from previous editions are easily implemented. Moreover, a lot of faculty attends sessions given by colleagues. Two person attend all the sessions. This allows fine-tuning key messages and prevents sharing contradictory messages.

Through an alumni e-newsletter and the ITM magazine, we also keep our alumni informed on what's happening at ITM. You are most welcome to share your experiences or thoughts related to the course, as well as your field experience with your colleagues. The e-newsletter published quarterly is made available through the ITM website.

5 Course management structure

The course is organized by the Department of Clinical Sciences and by the Department of Biomedical Sciences of the Institute under the supervision of its educational coordinator: Dr. (mzolfo@itg.be).

The management of the course is in the hands of the course coordination team:

Course leaders:

- Prof dr. Lutgarde Lynen, llynen@itg.be,
Unit of HIV/AIDS and Infectious Diseases, Department of Clinical Sciences

- Prof dr. Bouke De Jong, bdejong@itg.be,
Unit of Mycobacteriology, Department of Biomedical Sciences

Remark: Prof Lynen and Prof De Jong will yearly alternate to take the role of course leader

Course coordinator:

- Department of Clinical Sciences: Tom Decroo, tdecroo@itg.be;
- Department of Biomedical Science: Pauline Lempens, plempens@itg.be;

Course secretary:

- Department of Clinical Sciences: Jasmien Adams, jadams@itg.be
- Department of Biomedical Science: Nadia Ehlinger, nehlinger@itg.be

The **course coordinator** remains at your disposal for any support on academic and programmatic aspects (course content). They ensures the information flow between lecturers and participants and liaises with the **course leader** and the educational coordinator and Govert Van Heusden, ITM Academic Coordinator regarding the internal quality assurance of the course.

The course secretary takes care of all **administrative issues**, such as certificates, attestations, student cards, electronic badge, copies of lectures notes, logistics for lectures and group work. For advice on cultural and social events in town or on addresses for medical help or other matters you can contact the Student Service: studdienst@itg.be.

The **academic coordinator**, Govert Van Heusden, is also the 'ombudsman' for participants of all courses, dealing with major complaints. You can contact him by e-mail: gvheusden@itg.be or tel: 03 247 62 33.

6 Practicalities

ITM-identification card & electronic badge

Each student receives an electronic badge to allow access to ITM's buildings, departments and bicycle parking. If you lose the electronic badge, you should immediately inform the course secretariat. A new electronic badge costs 20 euros. The electronic badge should be returned at the end of the course; if not, there's a 20 euros fine.

The student card is your ITM-identification card, and also gives you discounts in our Karibu Cafeteria and for cultural events throughout Belgium.

➤ *You need to have both badges with you at all times when at the Institute!*

ITM access

Class rooms, laboratory practice rooms and group work rooms are spread over two buildings: Campus Nationalestraat and Campus Rochus.

The Institute is open from 8:00 till 19:00 hrs.

If you wish to study late at the Institute during the week, you can book a room* in the main building Nationalestraat until 21:00 hrs.

During weekends, you can book a room in the main building Nationalestraat from 9:00 till 17:00 hrs.

You can't stay at Campus Rochus after 19:00 hrs and you don't have access to Campus Rochus during weekends.

There are three bicycle parkings: on the corner of Nationalestraat/Kronenburgstraat, in the corner of the Campus Rochus garden and across Campus Rochus at n° 40. Access is only possible with an electronic badge, but bikes should still be locked individually. Bicycles have to be parked appropriately and allow free passage.

- **Only Room C and Computer Room will be made available and should be booked at the reception Nationalestraat. Rooms can only be used for studying, with respect for other students.*

Course venues

Leave classrooms clean and tidy. Don't leave anything on the tables, don't leave personal belongings. Use the big bins in the corridors. When smoking in the garden, don't leave cigarette butts on the terrace, on the grass or in the arbors: there are ashtrays at the different entrances to the building. Food nor beverages are allowed in the classrooms. Tables, chairs, flipcharts, black boards etc. can't be moved from the class rooms. Garden furniture should be put back on the terrace, after use on the grass.

- *In case of fire alarm, you leave the institute immediately through the nearest exit and from a group across the street. Leave the class room by the shortest way. Don't linger but don't run, don't take the elevator. Under no circumstances you should go back if you think you have forgotten something. Once outside and across the street, a staff responsible will check on you and give further instructions.*

Attendance

Lecturers have a lot to share: please come to class in time!

Attendance is expected at all obligatory course sessions. Attendance to the courses is an essential part of the learning process.

Turn off your mobile phones during courses.

Distribution of course notes, timetables & other information

All documents are placed on Moodle, our open-source platform. Students are expected to **consult it on a daily basis**, given the regular updates.

If documents have to be read before a lecture, you are notified by e-mail.

Students keep access to Moodle until three years after the course.

However, we advise you to download everything during the course: internet will not always be accessible when working abroad in the future.

A printout of the timetables of the upcoming week is posted at the entrance of the secretariat and should be checked regularly for eventual last minute changes which could not be communicated anymore by e-mail or Moodle.

Each student has an individual tray. Your tray is the one above – and not under - your name. These trays can't be used to store personal belongings, food or beverages.



ANNEX 1.

Timetable example

| | 13/05 - INTRO | 14/05 - DST | 15/05 - DST | 16/05 - TT / CDM | 17/05 - STR |
|--------------------|---|---|--|--|---|
| nr of case studies | 2 | 1 | 3 | 3 | 3 |
| 9:00-9:30 | 9:00-9:30: Introduction to the course <i>all teachers, Student Service</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> |
| 9:30-11:00 | Group 1 & 2: admin issues Group 3 & 4: improve Ppt case study (Jan, Pauline, Tom, Anita, Madelon) | DST1: definitions and concepts Frequently used terms (proportion method, MIC, ECOFF, clinical breakpoints, molecular genetics, ...) (Pauline) <i>Panel: B. de Jong, L. Rigouts</i> | DST5: Interpretation of phenotypic and genotypic DST results 1 case study: Brenda Methods for DST - indications, accuracy, interpretation, EP samples, PED samples, TAT (Leen) <i>Panel: B. de Jong, L. Rigouts</i> | PRO1: MDR-TB programmes Evidence on model of care for MDR-TB: community-delivery, task shifting, (Anita) 1 case study <i>Panel: A. Mesic</i> | RX2 - WHO guidelines 1 case study Evidence-base of 2019 MDR-TB guidelines - a closer look (Armand) <i>Panel: Gunta, Anita</i> |
| 11:00-11:15 | BREAK | BREAK | BREAK | BREAK | BREAK |
| 11:15- 13:00 | Group 3 & 4: admin issues Group 1 & 2: Improve Ppt case study (Jan, Pauline, Tom, Anita, Madelon) | DST2: Sample transport: practical guidance (Bouke/Elisa - new lecture) Plus LPA introduction incl review of strips (Pauline - new lecture) <i>Panel: B. de Jong, L. Rigouts</i> | DST6: Limitations of DST & Discordance in DST results 1 case study: Paidamoyo Extra case study: Aung Ko Ko Myanmar Limitations of DST (Bouke) <i>Panel: B. de Jong, L. Rigouts</i> | RX1: STR 1 case study Principles for constructing a tuberculosis treatment regimen + exercises (Tom) <i>Panel: A. Mesic</i> | PRO2: MDR-TB programmes Lessons learnt from stepwise implementation of new drugs and regimens and care delivery in KNCV TB programs (Gunta) 1 case study <i>Panel: Armand, Anita</i> |
| 13:00-14:00 | LUNCH | LUNCH | LUNCH | LUNCH | LUNCH |
| 14:00-15:45 | CDM1: Clinical epidemiology Pre- and post-test probability of disease - excel engine (Lut) 1 case study <i>Panel: B. de Jong; Manu</i> | DST3: Xpert: What's beyond the standard results? 1 case study: Akwuadikwa —Differences between Xpert and Xpert Ultra —A critical view on the Xpert technology (Emmanuel André) <i>Panel: B. de Jong, L. Rigouts</i> | DST7: interpretation of resistance to H & FQ 1 case study: Ei (can't come but Pauline presents) INH and FQ resistance: DST results are not binary (Pauline) <i>Panel: B. de Jong, L. Rigouts</i> | CDM2: Thresholds for clinical decision-making in the field of DR-TB (Lut) 1 case study <i>Panel: A. Mesic Manu</i> | RX3: STR STR in settings with low or high prevalence of resistance to FQ and/or 2LI (Anita) 1 case study <i>Panel: Armand, Gunta</i> |
| 15:45-16:00 | BREAK | BREAK | BREAK | BREAK | BREAK |
| 16:00-17:00 | CDM1: Clinical epidemiology Pre- and post-test probability of disease - excel engine (Lut) 1 case study <i>Panel: B. de Jong; Manu</i> | DST4: Mutations from target- or whole genome sequences Interpretation and challenges (Conor Meehane) <i>Panel: B. de Jong, L. Rigouts</i> | DST8: Lab visit and hands-on phenotypic DST interpretation (Bouke, Leen, Pauline) | CDM2: Thresholds for clinical decision-making in the field of DR-TB Harm & benefit of a decision to test, and a decision to treat, concepts of test threshold and treatment threshold (Lut) <i>Panel: A. Mesic, Manu</i> | RX4: STR STR: indications & modifications (Armand) <i>Panel: Anita, Gunta</i> |
| ROOM: ROCHUS WEST | | | | | |
| | | ROOM C | | ROOM C | |

Clinical Decision-Making for Drug Resistant Tuberculosis (DR TB) 2019-20

| nr of case studies | 20/05 - CDM | 21/05 - XDR | 22/05 - AE | 23/05 - COM & PED | 24/05 - Evaluation |
|--------------------|--|---|--|--|--|
| | 0 | 4 | 3 | 4 | |
| 9:00-9:30 | Expectations for the last days of the course <i>P. Lempens, Madelon, panel</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> | Learning points of the previous day <i>P. Lempens, Madelon, panel</i> | Staying connected after the course? <i>P. Lempens, Madelon, panel</i> | Case study presentations (1/3) |
| 9:30-11:00 | DST9: Hands-on LPA interpretation in the classroom (Bouke, Leen, Pauline) | RX6: Construct a standardized regimen with core and add-on SL drugs 1 case study Impact of initial resistance on the outcome of standard regimens (Armand) | AE1: AE of DR-TB drugs 1 case study Adverse events of the 9-M regimen: monitoring and management (Alberto) | COM2: co-morbidities 1 case study | Panel: A. Piubello, A. Van Deun, G. Dravniec, G. Groenen |
| 11:00-11:15 | BREAK | BREAK | BREAK | BREAK | BREAK |
| 11:15- 13:00 | RX5: use 2 core drugs in one regimen (FQ + BDQ)? - presentation of success and failures (Anita & Alberto) debate | RX7: Construct a standardized regimen with core and add-on SL drugs 1 case study MDR-TB treatment programme in Niger (Alberto) Experiences with modifications to the STR (Alberto) | AE2: AE of DR-TB drugs 1 case study Audiometry: significance, measurement, and clinical implications (Alberto) | Referral genotypic testing MIRU-VNTR & WGS: principles & indications (Howard) 1 case study | Case study presentations (2/3) |
| 13:00-14:00 | LUNCH | LUNCH | LUNCH | BREAK - studying at ITM | PHOTO + LUNCH |
| 14:00-15:45 | PRO3: DR survey - novel designs (Leen) | RX8: Construct a standardized regimen with core and add-on SL drugs 1 case study Modified shorter standardized regimens for pre-XDR and XDR-TB (Alberto) | RX9: New and repurposed DR-TB drugs New and repurposed drugs (Anita) | PED1: pediatric DR-TB care DR-TB in children (Jay Achar) | 14:00-15:15: Case study presentations (3/3) |
| 15:45-16:00 | BREAK | BREAK | BREAK | BREAK | 15:15-15:30: BREAK |
| 16:00-17:00 | PRO4: Surveillance Surveillance, how to prevent resistance (Armand) | AE3: AE of DR-TB drugs QT and QTc: significance, measurement, and clinical implications (Alberto) 1 case study | COM1: co-morbidities Co-morbidities (Anita) 1 case study | PED2: pediatric DR-TB care 2 case studies | 15:30-16:30: Evaluation |
| | | | | | 16:30-18:30: Closing ceremony |



ANNEX 2.

Study guide eDRTB 2019-20

HOW TO LOGIN TO OUR WEBSITE

Go to

<http://mdrtb.itg.be>

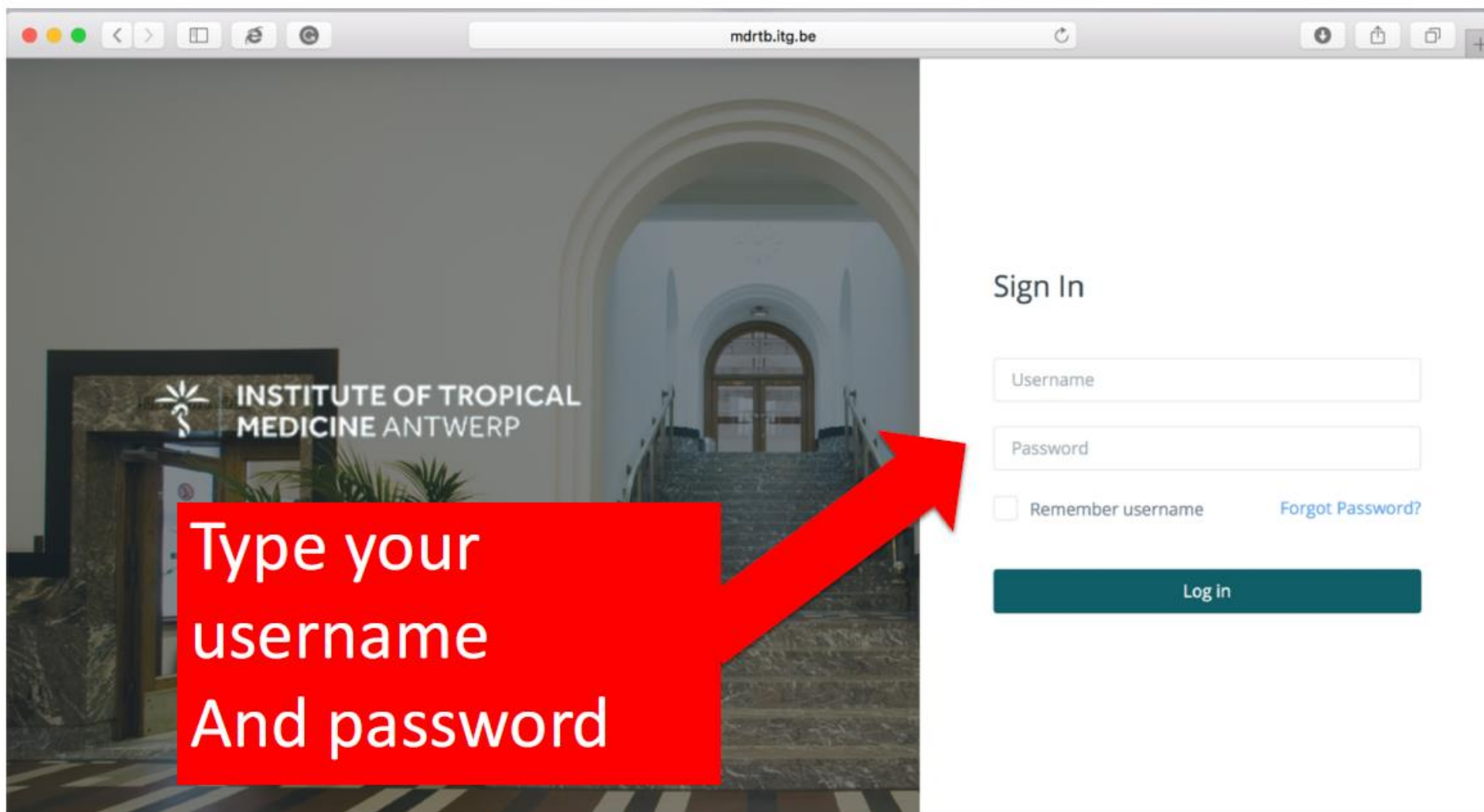
The image shows a web browser window with the address bar displaying `mdrtb.itg.be`. The website has a dark sidebar on the left with a logo and a home icon. The main content area features a banner image of a street scene. In the top right corner, there is a 'Log in' link with a user icon. Below the banner, under the heading 'Available courses', there is a course card for 'Online module DR-TB course 2018' which includes a thumbnail image of a person at a computer. Two large red arrows are overlaid on the image: one points from a red text box to the 'Log in' link, and the other points from the same text box to the course card thumbnail.

Log in

Available courses

Online module DR-TB course 2018

Click the course icon or the Login



The image shows a web browser window with the address bar displaying "mdrtb.itg.be". The website features a background image of a building entrance with a large archway. On the left, the logo of the "INSTITUTE OF TROPICAL MEDICINE ANTWERP" is visible. On the right, there is a "Sign In" section with the following elements:

- A "Username" input field.
- A "Password" input field.
- A checkbox labeled "Remember username".
- A link labeled "Forgot Password?".
- A teal "Log In" button.

A red rectangular box with white text is overlaid on the left side of the page, containing the instruction: "Type your username And password". A large red arrow points from this box towards the "Username" and "Password" input fields.

Here are some icons that you might need to be familiar with



Glossary



Pre-test or Post-test



Upload your assignment



Discussion forum



Participants



Repository

How to use the discussion forum?



During the introduction week, only one forum, Presentation forum, will be open and you will be asked to post a presentation of yourself in this forum.

The forum can be accessed through a link in the right menu(see picture). or a link on each module











Every week new discussions will be started, linked to the module of the week. Discussions in the forum are organised by topic. If you open a specific forum, you will see the list of all the topics discussed so far in this forum. To participate in a discussion simply click on the topic in question.

Online module DR TB course 2018
[Home](#) / [Courses](#) / [DR-TB 18](#) / [Week 1](#) / W1.2 Discussion forum Know your epidemic

Search forums

W1.2 Discussion forum Know your epidemic

[Add a new discussion topic](#)

| Discussion | Started by | Replies | Last post |
|--|---|---------|--|
| DR TB short course regimen of 9 months |  Waliullah Hatam Khan | 7 | Taofeekat Taiwo Ali Sun, 25 Feb 2018, 6:32 AM |
| Summary week 1 |  Tom Decroo | 2 | Tom Decroo Fri, 2 Mar 2018, 9:04 AM |
| Myanmar Data |  Ko Ko Aung | 2 | Ko Ko Aung Wed, 21 Feb 2018, 6:40 AM |
| Data From Italy |  Gianluca Granà | 0 | Gianluca Granà Thu, 1 Mar 2018, 5:17 PM |
| Swaziland experience |  Daniel Meressa Kokebu | 2 | Taofeekat Taiwo Ali Mon, 26 Feb 2018, 1:32 PM |
| Indicators for an MDR TB program |  Taofeekat Taiwo Ali | 0 | Taofeekat Taiwo Ali Wed, 28 Feb 2018, 4:14 AM |
| Data from Nepal |  Deebya Raj Mishra | 0 | Deebya Raj Mishra Tue, 27 Feb 2018, 4:05 AM |
| TB diseases burden: Measures of TB burden in a country |  Yves Habimana Mucyo | 0 | Yves Habimana Mucyo Mon, 26 Feb 2018, 8:08 AM |
| Swaziland experience |  Taofeekat Taiwo Ali | 0 | Taofeekat Taiwo Ali Sun, 25 Feb 2018, 6:08 PM |
| How to reduce The Incidence Of DR TB |  Sanna Saidykhan | 0 | Sanna Saidykhan Sun, 25 Feb 2018, 5:28 PM |

There are two ways to post your questions and comments in a forum.

You can either start a new topic (1), or answer an existing one (2). (1) Start a new discussion by 'adding a new discussion topic'

The screenshot shows the 'W1.2 Discussion forum Know your epidemic' page. At the top, there is a breadcrumb trail: 'Home / Courses / DR-TB'18 / Week 1 / W1.2 Discussion forum Know your epidemic'. A search bar labeled 'Search forums' is in the top right. Below the forum title, a red rectangle highlights a button labeled 'Add a new discussion topic'. A large red arrow points from this button towards the forum topics list. The list has columns for 'by', 'Replies', and 'Last post'. Two topics are visible: 'DR TB short course regimen of 9 months' by Waliullah Hatam Khan with 7 replies, and 'Summary week 1' by Tom Decroo with 2 replies.

| | by | Replies | Last post |
|--|----------------------|---------|--|
| DR TB short course regimen of 9 months | Waliullah Hatam Khan | 7 | Taofeekat Taiwo Ali Sun, 25 Feb 2018, 6:32 AM |
| Summary week 1 | Tom Decroo | 2 | Tom Decroo Fri, 2 Mar 2018, 9:04 AM |

Go to “Add a new discussion topic” on the forum (as shown before).

Put the name of the topic you wish to introduce in the “subject” box (1). Try to choose a name that will be understood by all. Then type your text in the main box.

When it is done, scroll down the page and click post to forum.

(2) Below the text box, you can add an attachment if needed by browsing for a document

Online module DR TB course 2018
Home / Courses / DR-TB'18 / Week 1 / W1.2 Discussion forum Know your epidemic

W1.2 Discussion forum Know your epidemic

▼ Collapse all

▼ Your new discussion topic

Subject

Message

Attachment

Discussion subscription ☐

Maximum size for new files: Unlimited, maximum attachments: 9

Files

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Send forum post notifications with no editing-time delay ☐

Tags

No selection

Enter tags... [Manage standard tags](#)

There are required fields in this form marked ❗.

(2) Reply to an existing topic

If you wish to answer or comment on an ongoing topic in the forum you can click on 'reply' and then post your comment in the text box that appears (see picture below).

W1.2 Discussion forum Know your epidemic
Indicators for an MDR TB program

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Indicators for an MDR TB program
by [Tasfekerat Tawo Ali](#) - Wednesday, 28 February 2018, 4:14 AM

Nigeria ranks 8th globally for MDR/RR TB burden with an estimated incidence of 20,000 cases at 11/100,000 population in 2016 (4.3% among new TB cases and 25% among previously treated TB cases). TB case detection in 2016 was only 24%, hence achievement of MDR/RR TB indicators was equally low: only 1686 cases were laboratory confirmed. In 2017, Nigeria diagnosed only 9% of estimated 20,000 MDR/RR cases (unpublished NTRLC report, 2018) of which 78% were enrolled on second line drugs. This shows fairly moderate cascade loss. However treatment success rate has steadily increased from 61% among 2016 cohort to 74% among 2014 cohort (2013 was slightly higher at 77%).

This gap analysis suggests inefficiency in laboratory and clinical care performance which is measured by routine quarterly data collected from the basic management unit of TB (BMU) at the local govt. level to the State and National TB programs using monthly summary forms and templates.

Suggested indicators for MDR TB program:

Impact indicator: **MDR/RR TB incidence**
Proportion of new TB patients with MDR/RR TB (New TB patients with MDR-RR TB / All forms of TB)

Coverage indicator: **Lab diagnosis access**
Percentage of TB patients accessing gene expert (Total no of patients tested using gene expert/Total TB cases notified)

Coverage indicator: **Treatment access**
Proportion of MDR/RR TB cases notified that began second line treatment (No of MDR/RR TB that began second line treatment/Total no of MDR/RR TB notified)

Outcome indicator: **Treatment success rate (TSR)**
Percentage of MDR/RR TB successfully treated (No of bacteriologically confirmed MDR/RR TB cases enrolled on SLD with treatment success i.e. cured + completed treatment/No of bacteriologically confirmed MDR/RR TB cases enrolled on SLD)

Laboratory performance:
Proportion of functional laboratories (gene experts/culture) that are functional
Proportion of laboratories showing adequate quality assessment performance (routine external quality assurance measures should be institutionalized).

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How to use the submit your assignment?

W03.E Exercise: Submit an assignment

Grading summary

| | |
|----------------------|----|
| Hidden from students | No |
| Participants | 21 |
| Submitted | 11 |
| Needs grading | 11 |

View all submissions

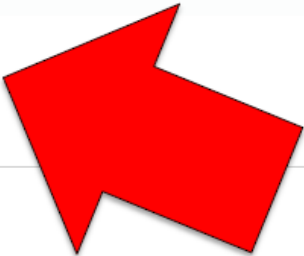
Grade

Submission status

| | |
|---------------------|---|
| Attempt number | This is attempt 1 (1 attempts allowed). |
| Submission status | No attempt |
| Grading status | Not graded |
| Last modified | - |
| Submission comments | <div>Comments (0)</div> |

Add submission

You have not made a submission yet



Click the add submission button

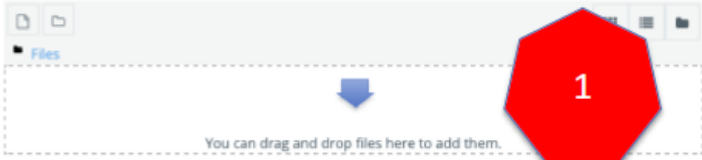
Online module DR TB course 2018
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W0.3.E Exercise: Submit an assignment


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File submissions

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The file upload interface consists of a dashed rectangular box with a blue arrow pointing downwards into it. Above the box is a file explorer icon and a 'Files' label. Below the box is the text 'You can drag and drop files here to add them.' A red octagon with the number '1' is placed over the dashed box.



A dark green button labeled 'Save changes' and a grey button labeled 'Cancel'. A red octagon with the number '2' is placed over the 'Save changes' button.

Previous Activity Next Activity

- (1) Drag and drop your file
- (2) Save changes

DO YOU WANT TO STORE THE
LECTURES OFFLINE. PLEASE USE THE
APPS FOR YOUR COMPUTER OR ANY
MOBILE DEVICE?

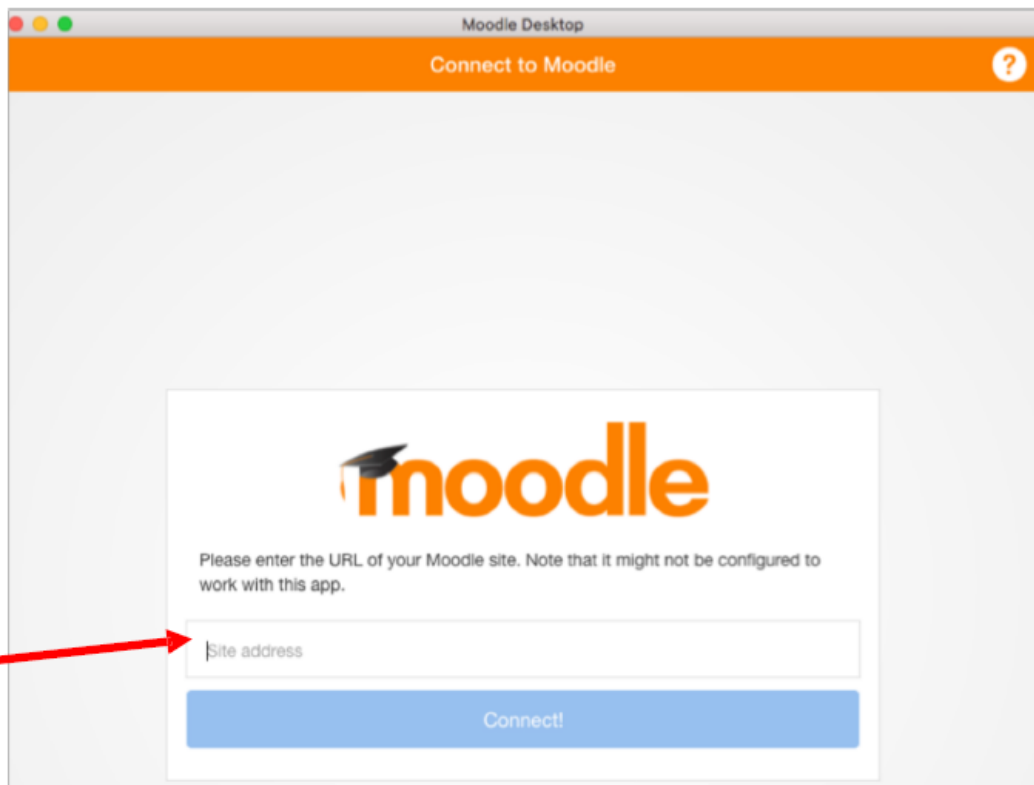
Moodle Desktop (only for Windows 7, 8 and Mac)

This application will allow you to save course content on your computer and access it without access to the internet (offline).

You can download the application for your Mac or Windows from this link


<https://download.moodle.org/desktop/>

After finishing the installation, please type the address of our course page <http://mdrtb.itg.be>



Moodle Desktop

Connect to Moodle

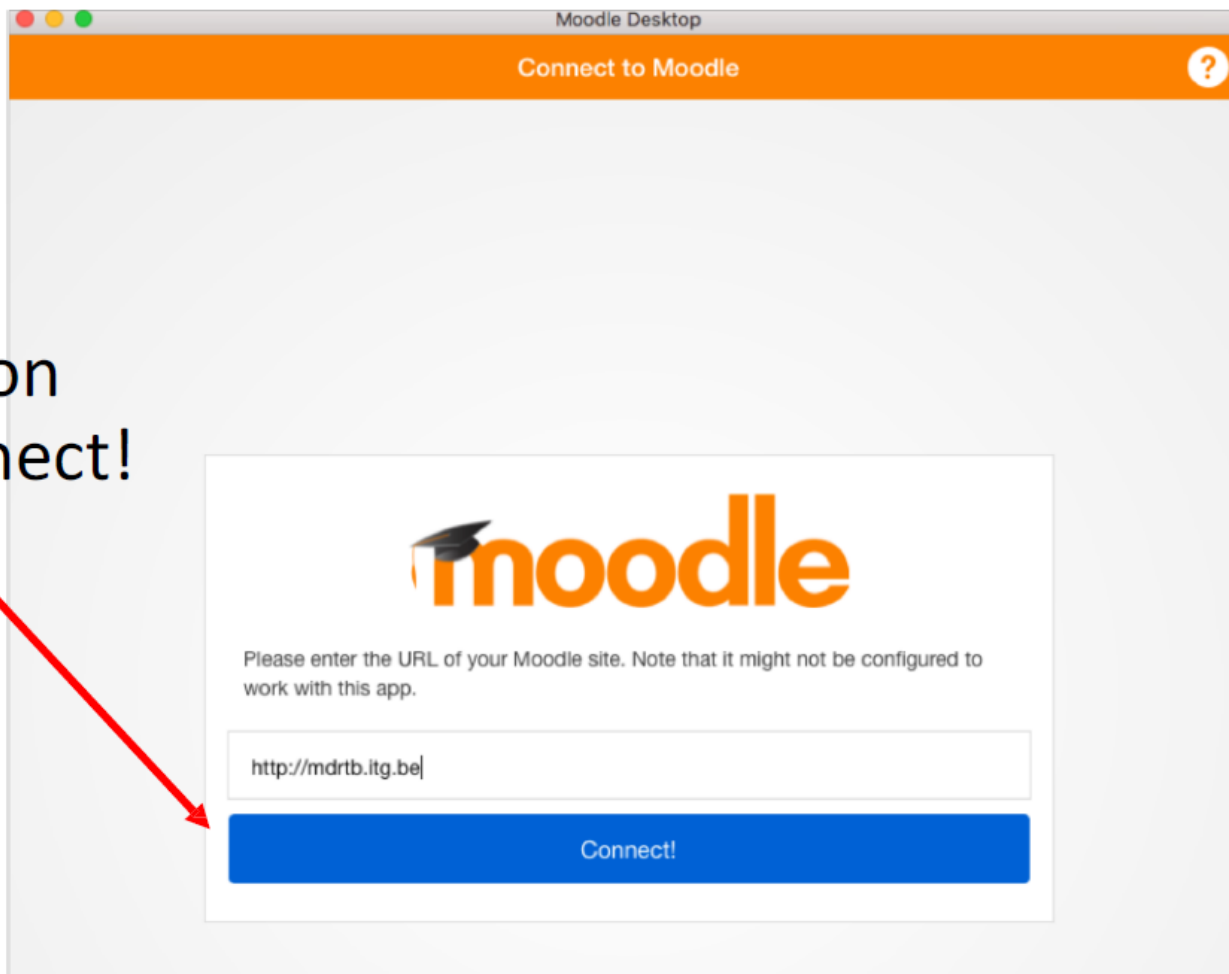


Please enter the URL of your Moodle site. Note that it might not be configured to work with this app.

Site address

Connect!


Click on
“Connect!”
”



The image shows a window titled "Moodle Desktop" with a subtitle "Connect to Moodle". The window has a light gray background and a white central area. In the center of the white area is the Moodle logo, which consists of a graduation cap icon and the word "moodle" in orange. Below the logo, there is a text prompt: "Please enter the URL of your Moodle site. Note that it might not be configured to work with this app." Below this prompt is a text input field containing the URL "http://mdrtb.itg.be". At the bottom of the white area is a blue button with the text "Connect!". A red arrow points from the text "Click on 'Connect!' " to the "Connect!" button.

Moodle Desktop

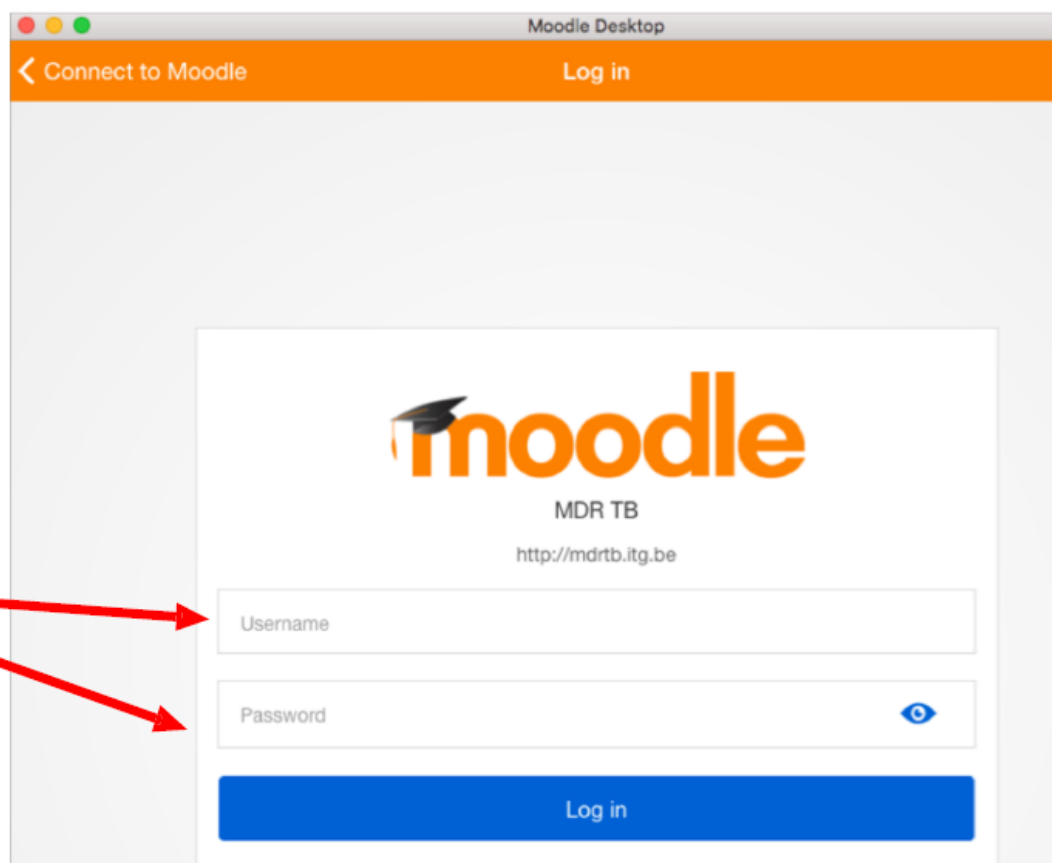
Connect to Moodle

moodle

Please enter the URL of your Moodle site. Note that it might not be configured to work with this app.

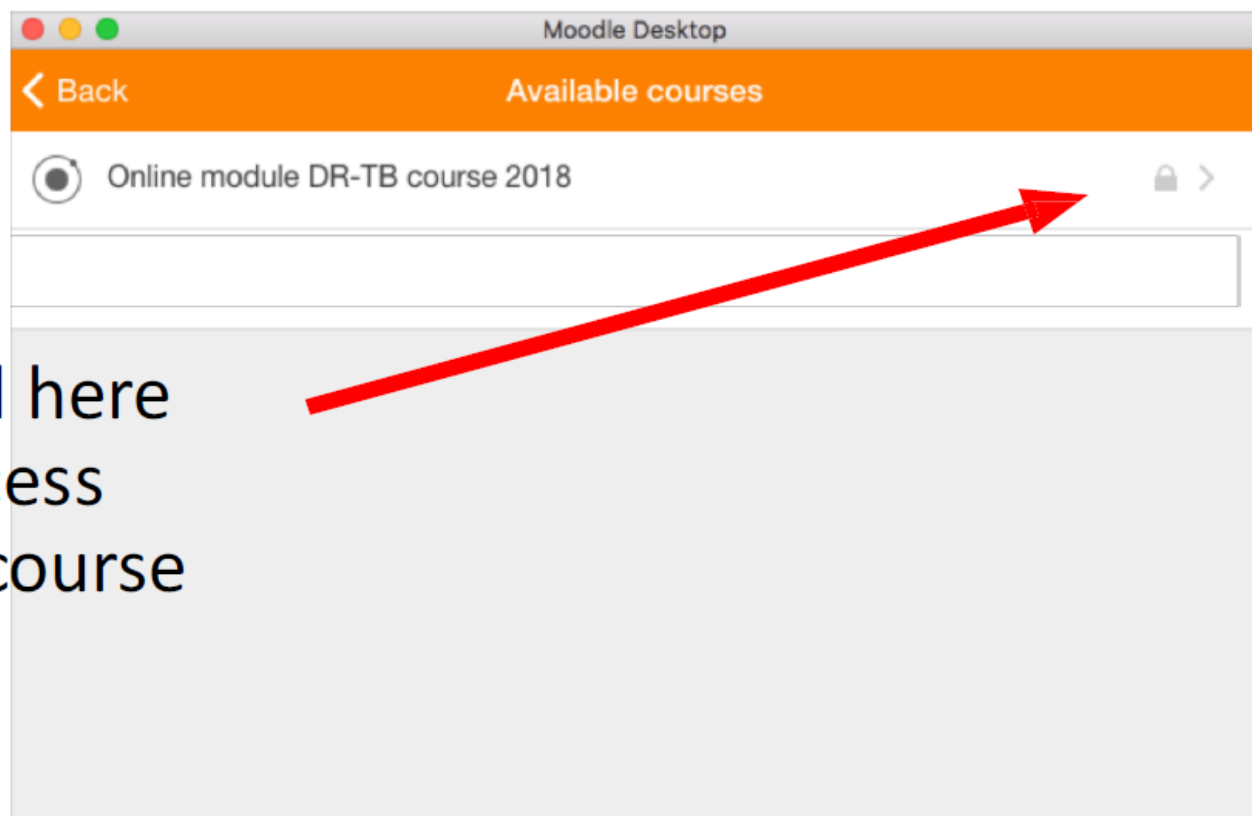
Connect!

To login,
please type
your
username and
password and
click on “Log
in”

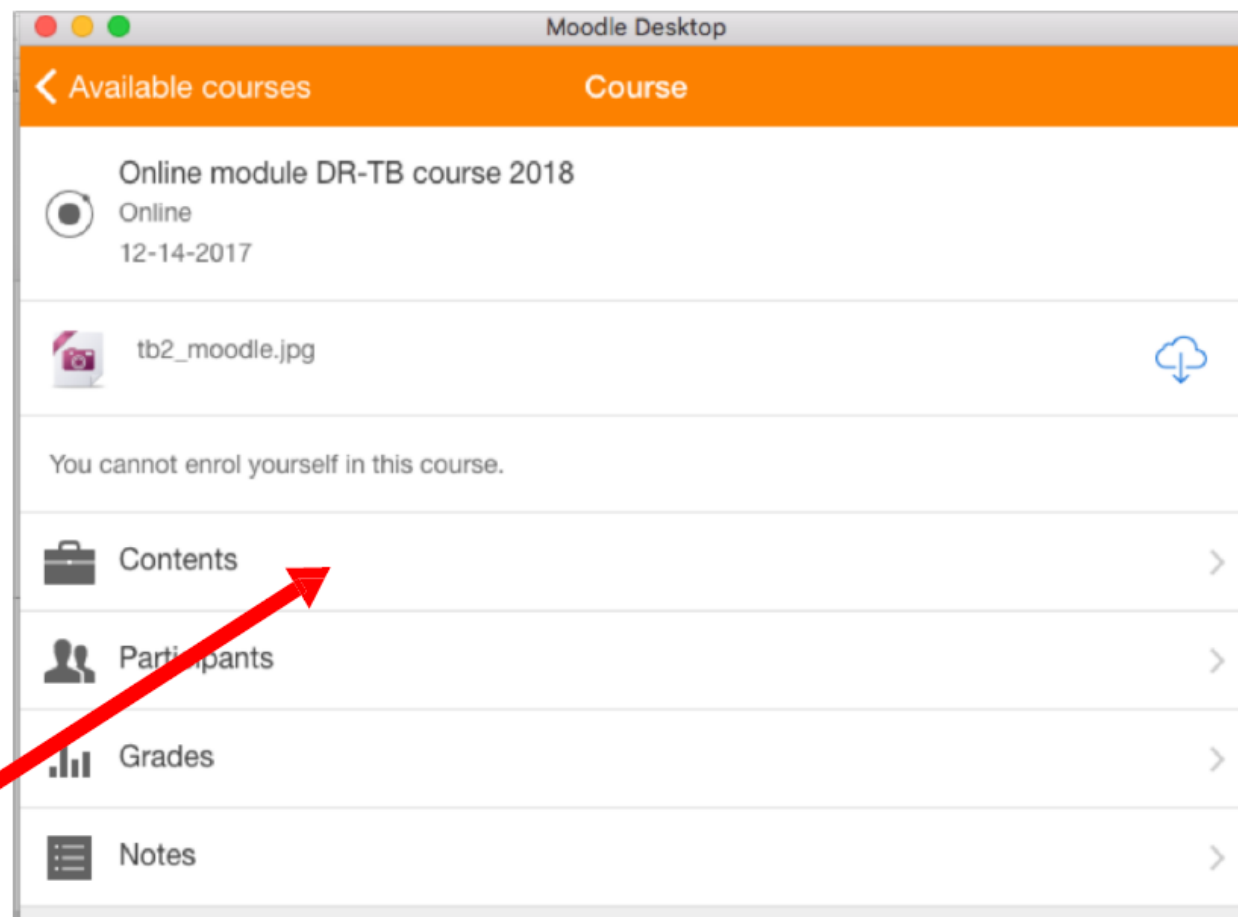


The screenshot shows a web browser window titled "Moodle Desktop". The browser's address bar displays "< Connect to Moodle" and "Log in". The main content area features the Moodle logo (a graduation cap over the word "moodle") and the text "MDR TB" and "http://mdrtb.itg.be". Below the logo are two input fields: "Username" and "Password". The "Password" field has a blue eye icon to its right. At the bottom of the form is a blue button labeled "Log in". Two red arrows originate from the text "Log in" in the instruction on the left and point to the "Log in" button and the "Password" field.

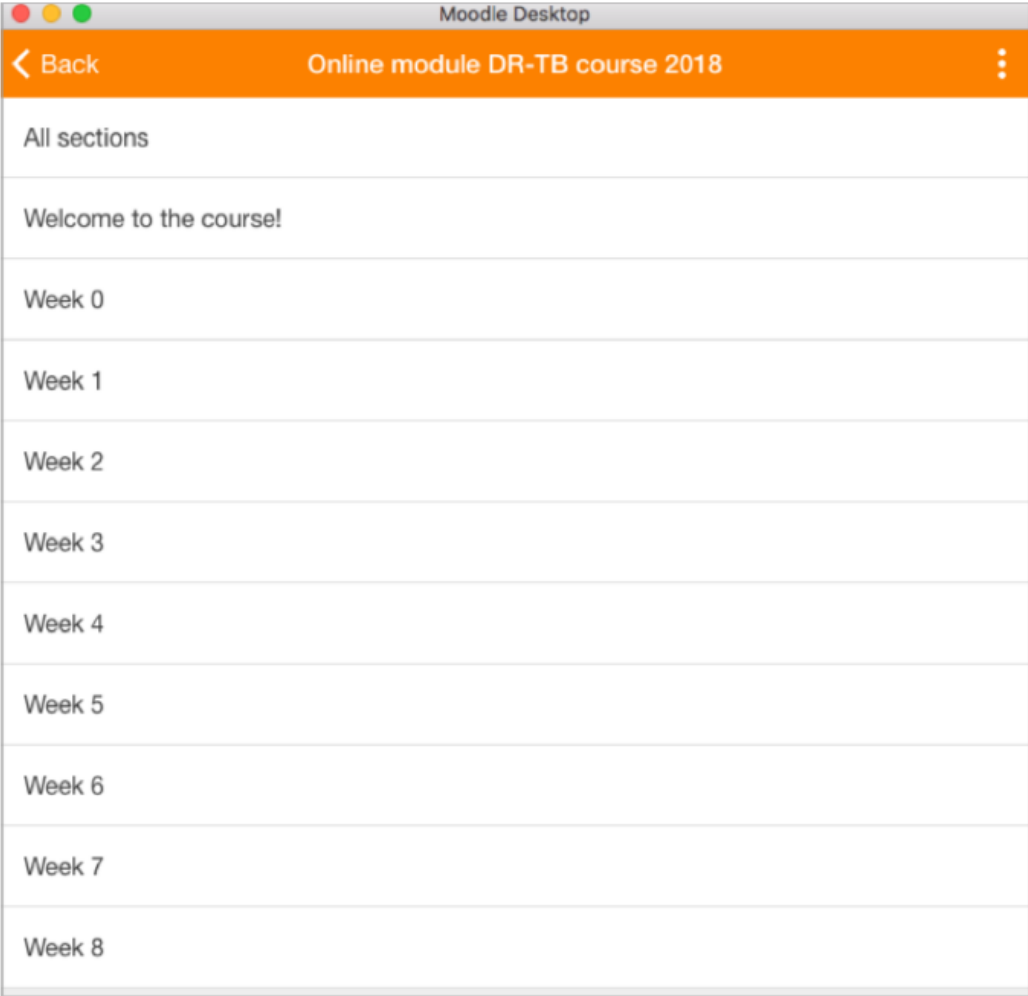
... and here
to access
your course

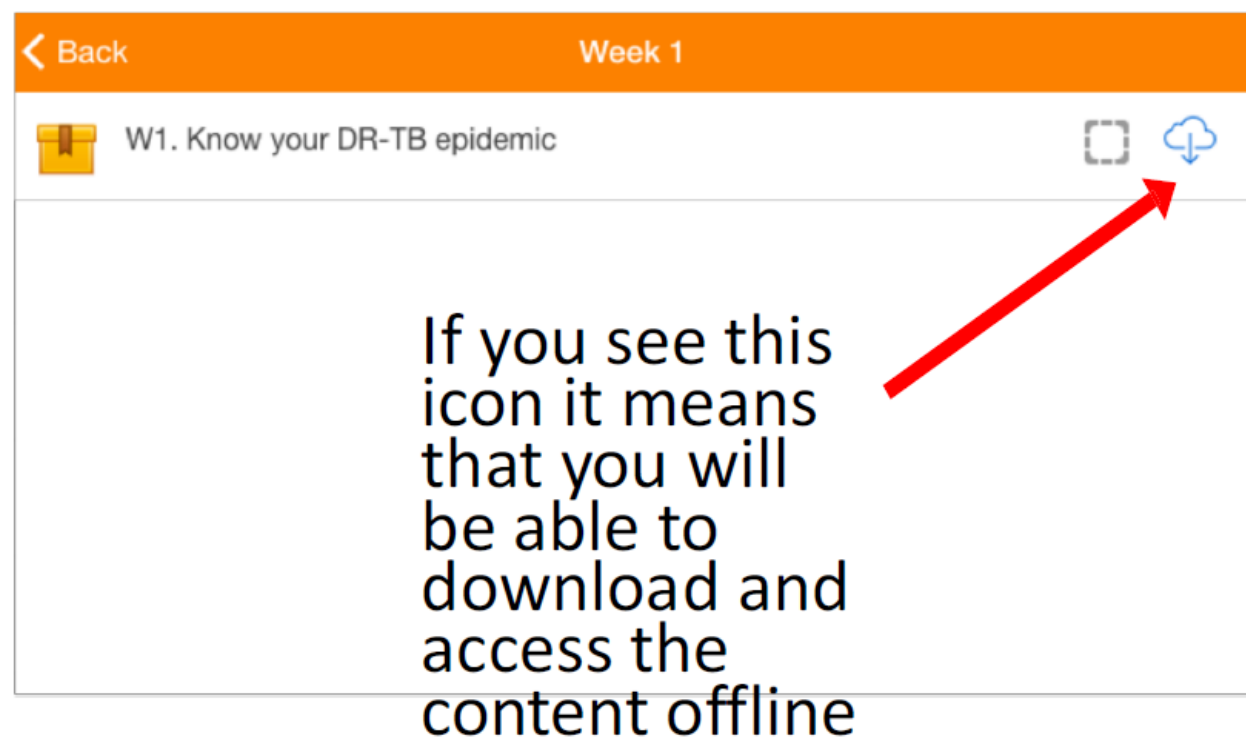


Click
here to
access
the
content



Click to
access
the
different
weeks

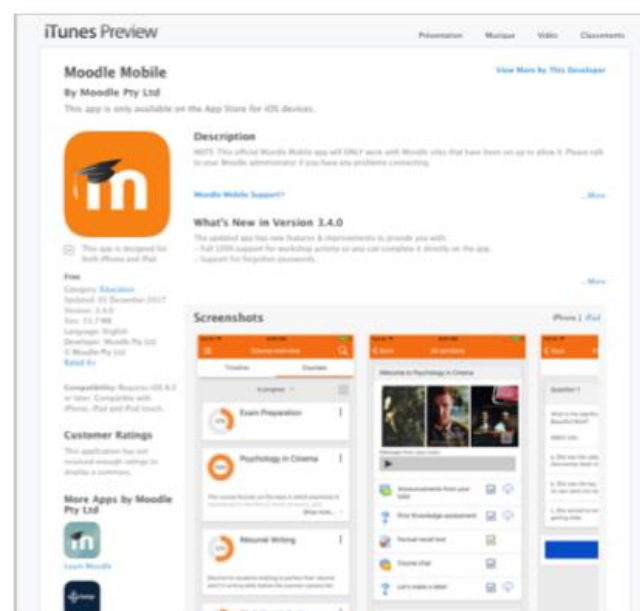


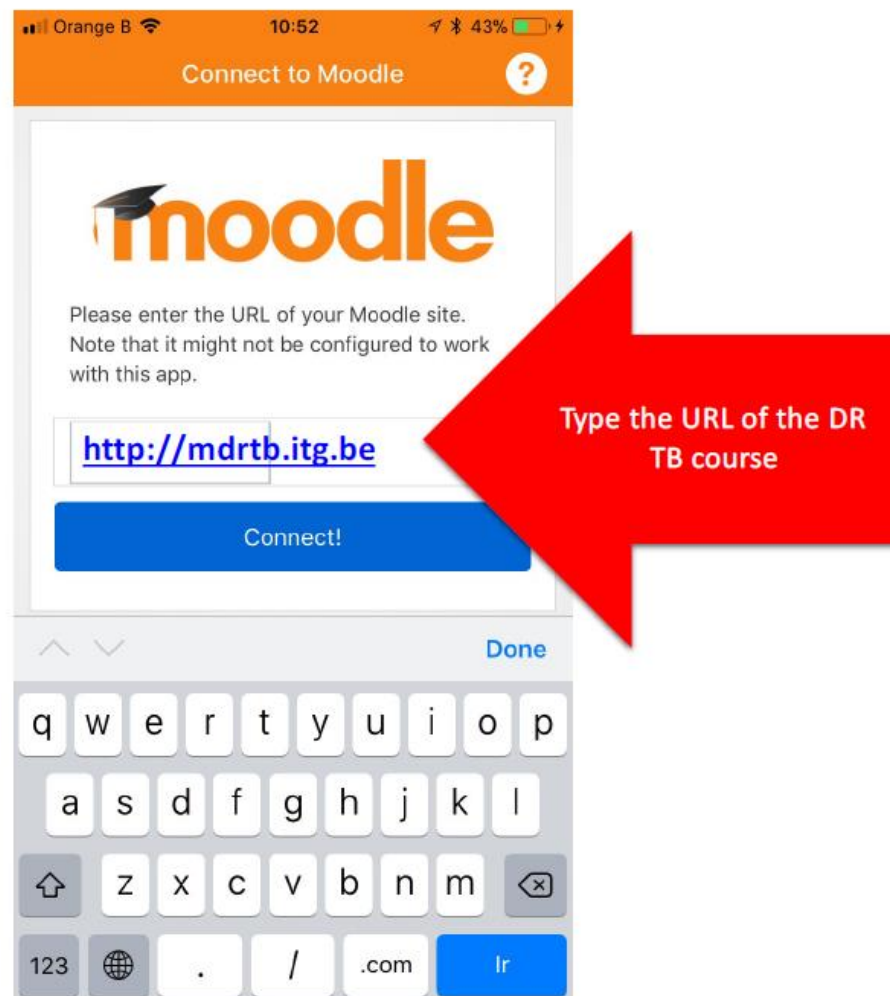


Moodle Mobile Phones and Tablets (Android and Apple iOS)

This application will allow you to save course content on your mobile phone or tablet and access it without access to the internet (offline).

Download the Moodle mobile app for your smartphone or tablet from iTunes store or Google Play and install it





The instructions on how to
access the course and content
are the same as for the Desktop
app