



D5.1

REPORT ON MODALITIES FOR THE ORGANISATION OF AN ADVANCED TRAINING COURSE FOR USERS



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Abstract:	IS_MIRRI21 aims to develop a Training & Education gateway that will be used to inventory, streamline and promote the training courses that are currently offered by partner mBRCs. An advanced training course or summer school will be developed based on these courses. A questionnaire sent out to MIRRI partners received information on 25 courses, which is presented in this report. Based on that data, suggestions are made on the course content, selection criteria, fees and admission of a MIRRI training course.
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Abstract

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Table of Contents

1. Introduction	1
2. Questionnaire Responses	3
3. Suggestions for training courses.....	6
3.1. Trainee selection criteria:.....	6
3.2. Fees:.....	6
3.3. Course content:	6
3.4. Evaluation system:.....	6
Appendix.....	8
▪ Questions:	8
▪ Answers	10

Content of Tables

Table 1 – Questionnaire	8
▪ Table 2 – Spreadsheet including total of answers and percentage.....	10



1. Introduction

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IS_MIRRI21 aims to develop a Training & Education gateway that will be used to inventory, streamline and promote the training courses that are currently offered by partner mBRCs since students and scientists are not always aware of existing training offers.

An advanced training course or summer school will be developed based on these courses that will combine the strong points of the current fragmented training offer and that will correspond to the needs of the users which will include scientists as well as staff from industrial and international organizations using mBRCs services.

Developing this course requires (1) the definition of criteria for the selection of trainees, (2) an agreement on fees, (3) the production of a set of 8 learning modules that will also be supported by at least 8 webinars, (4) a system to evaluate trainees so that they can obtain a Continuous Professional Development (CPD) certificate.

In order to determine the education and training currently offered within MIRRI, a questionnaire was sent out to the partner mBRCs. The goal of this survey was to discover the structure, methods and contents of training being offered within the consortium. The questionnaire contained 24 questions (see Appendix).



2. Questionnaire Responses

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Based on 24 questions (see Appendix), information on a total of 25 training courses was received from 12 partner institutions.

- Type of training: 88% of courses are available on site and 20% are available as webinars.
- Language: 60% of courses are available in English, 40% in French and 32% in other languages.
- Frequency: 84% of courses are annual, 8% twice a year, 4% every 2 years and 4% on demand.
- Duration: 36% of courses last 1 day or less, 45% last 1 week or less, 5% last 1 month or less and 14% last more than 1 month.
- Total hours: 36% of courses consist of 5 hours or less, 32% consist of 6 to 25 hours and 32% consist of more than 25 hours.
- Course fee: 40% of courses are free, 28% cost 1000 EUR or less and 32% cost more than 1000 EUR.
- Forms of publicity: 36% of courses use none, 12% use postal mailing, 24% use email lists, 24% use social media, 8% use conferences and 16% use newsletters.
- Number of students: 24% of courses had 1 to 10 students, 57% had 11 to 25 students and 19% had more than 25 students.
- Participant selection process: 48% of courses had no selection process, 19% selected by order of registration and 33% were part of an established degree.
- Number of teachers: 39% of courses had 1 to 3 teachers, 44% had 4 to 10 teachers and 17% had more than 10 teachers.
- Student/teacher ratio: 41% had a ratio of less than 2 to 1, 41% had from 2 to 1 up to 6 to 1 and 18% had a ratio of more than 6 to 1.
- Main types of teaching materials: 24% of courses used PowerPoint presentations, 36% used lab sessions, 8% used software demonstrations, 20% used multimedia, 12% used books.
- Type of assessment: 50% used a satisfaction survey, 36% used an exam, 7% used self-assessment, 7% used continuous evaluation.
- Degree: 35% of courses are a part of an Under-Graduate or Post-Graduate programme and 65% are not.
- Integration: 74% of courses can be integrated in an IS_MIRRI training programme and 26% of courses cannot. That is, the respondents claimed 14 out of 19 courses can be integrated into IS_MIRRI21 training programme.
- Application form: 71% of courses use an application form and 29% of courses do not.
- Course content: 24% of courses taught general microbiology, 28% microbial preservation methods, 16% cultivation methods, 16% isolation methods, 32% identification methods,

D5.1 Report on modalities for the organisation of an advanced training course for users

28% taxonomy/phylogeny, 24% the management of biobanks/culture collections, 8% legal issues and 4% ethical issues.

- Organisms studied: 20% of courses focused on fungi, 8% on bacteria, 16% on cyanobacteria/algae, 4% on viruses and 64% did not focus on or specify a certain group of organisms.



3. Suggestions for training courses

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3.1. Trainee selection criteria:

The plurality of courses had no selection process, while those that did rely on registration order. A MIRRI training course could therefore select trainees based on the order with which they register, which would be an impartial method of selecting them. Alternatively, it will be based on the scientific and professional merit of candidates which means establish a transparent process of selection and a panel for evaluation. Moreover, several parameters can be established and applied according to the level and prerequisites of the course.

3.2. Fees:

The majority of courses had a fee and those were often lower for trainees belonging to non-profit organizations. In addition, some courses had an early bird system that ensured a lower fee for trainees who registered early. Both of these methods could be implemented in a MIRRI training course. Besides, the fees must cover the contained costs for the disbursement and, if applicable, the costs for the certification of the credits obtained (optional).

3.3. Course content:

The most common methods taught in courses offered by MIRRI partners included (1) isolation, (2) identification, (3) cultivation, (4) preservation and (5) classification of microorganisms. These 5 sets of procedures could form part of the 8 learning modules that will be contained in the Specialized EuroMIRC course. Three other topics that are on offer and could be of interest for a course include (6) the management, (7) organization and (8) legal framework of biobanks/culture collections. The majority of offered courses do not focus on one specific type of organism, however modules focusing on fungal, bacterial, cyanobacterial/algae or viral microbiology could also be offered. The large majority of courses being offered by MIRRI partners could be integrated into a MIRRI course, meaning that they could be utilized in such a training course.

Moreover, MIRRI will be able to organize tailor-made courses, on-demand, for private companies or specific groups of stakeholders. MIRRI also considers organizing training courses in collaboration with other Research Infrastructures. Finally, MIRRI will provide a series of webinars (free of charge) reaching out to a broader audience.

3.4. Evaluation system:

The majority of courses had no evaluation of students, however among those that evaluated students, the most common system was via exams. A MIRRI training course could therefore use exams to evaluate trainees. A Quality Control/Quality Assurance is envisaged to be implemented and an evaluation of learn outcomes need be established. This can be also important for a final CPD certificate or give credits for a CPD scheme. A user satisfaction survey can be used in order to determine whether the course covers the students' needs.



Appendix: Questionnaire

Appendix

▪ Questions:

Table 1 – Questionnaire

<p>IS_MIRRI21 PROJECT</p> <p>Survey of Training Activities Offered in 2021 by the Consortium members</p> <p>For each course/workshop/seminar please fill in this questionnaire and send it both to dhatzini@biol.uoa.gr, plaskaris@biol.uoa.gr</p> <p>Deadline: Wednesday, March 10th, 2021</p>
1. Partner Organisation:
2. Name and e-mail of Person Responsible:
3. Title of Training Course:
4. Type of training (summer school, webinar, on-site training, etc.)
5. Course Webpage:
6. Language (Specify if English could be used):
7. Frequency: (Annual, Biannual, etc.)
8. Duration (in days/weeks/months):
9. Total Hours of Training:
10. Course Fee in € or Equivalent (Please specify which teaching materials are included on this cost):
11. Forms of publicity (other than web-page):
12. Number of Participants Admitted:
13. Participant Selection Process (If any, please specify):
14. Number of Teachers/Coaches Involved:
15. Course Main Goals:
16. Main Learning Outcomes:
17. General Contents:

18. Main Types of Teaching Materials Used (Lab equipment, multimedia, specific software, etc.):
19. Type of Assessment or Self-Assessment (If any, please specify):
20. What are the Main Subjects that Participants Demand?
21. Other Relevant Information:
22. Is this Course part of an Under/Post-graduate Programme? (If yes, please specify):
23. Could this course be integrated in an IS_MIRRI training programme?
24. Is an application form used for the course? (If yes, please attach it along with this questionnaire):

▪ Answers

Table 2 – Spreadsheet including total of answers and percentage.

Type of training	Number o	Percentage				
On-site	22	88				
webinar	5	20				
Total:	25					
Language						
English	15	60				
French	10	40				
Dutch	1	4				
Spanish	3	12				
Italian	2	8				
Latvian	2	8				
Total:	25	32				
Frequency						
Every 2 years	1	4.166667				
Annual	20	83.33333				
Twice a year	2	8.333333				
On demand	1	4.166667				
Total:	24					
Duration						
1 day or less	8	36.36364				
1 week or less	10	45.45455				
1 month or less	1	4.545455				



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