

## Ideas for Training Foci using the GBRMC library (revised 10 July 2012)

Training Focus	Description	GBRMC courses used	Length
<b>Trainers' Development Program</b>	<p>Designed for identified trainers for a region or training center. After this course, students will be prepared to utilize the GBRMC library and develop customized material. Students who take this class will be considered to have completed the GBRMC Trainers' Orientation course and will be enrolled in the Trainers' Network.</p> <p>Morning sessions: GBRMC courses</p> <p>Afternoon sessions: exercises that dissect and reconstruct morning courses to highlight and apply key skills for training and for using the GBRMC course in training events</p> <p>Follow-on assignments: development of training events with "mentor-in; mentor-out" approach</p>	<p><b>Morning Courses:</b></p> <ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Risk Characterization &amp; Evaluation</li> <li>• Risk Mitigation Strategies</li> <li>• Developing, evaluating, and validating standard operating procedures</li> <li>• Measurement &amp; Analysis of Biorisk Management Performance</li> </ul> <p><b>Courses to be used for afternoon exercises:</b></p> <ul style="list-style-type: none"> <li>• Trainers' Orientation</li> <li>• Adult Education Strategies for Biorisk Management Training</li> <li>• Considerations for Training in Biorisk Management</li> </ul> <p><b>All courses will be available for student review and selection of training elements from each for presentation to class</b></p>	5 to 6 days, plus follow-on assignments
<b>Biorisk Management Policy and Program</b>	<p>Designed for top and scientific management and biorisk management advisors.</p> <p>For those institutions/sectors that are ready to establish a biorisk management system – this course will guide managers and advisors in developing policies and key programmatic elements for their specific situation. Students will leave with tools and documents that can be implemented in their facilities with very little additional external input.</p> <p>Draft documents developed:</p> <ul style="list-style-type: none"> <li>• Perceptual Survey Analysis for Biorisk Management (pre and post)</li> <li>• Biorisk Management Policy</li> <li>• Legal Requirements Matrix and Action Plan</li> <li>• Template (partially completed) with BRM roles &amp; responsibilities, objectives &amp; goals</li> <li>• Terms of reference for Biorisk Management Committee</li> <li>• Roster for Biorisk Management Committee</li> </ul>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Biorisk Characterization &amp; Evaluation</li> <li>• Writing and communicating biorisk management policy</li> <li>• Establishing and Communicating BRM roles, responsibilities, objectives, and goals</li> <li>• Identifying legal requirements that impact biorisk management</li> <li>• Work Program Review and Approval</li> </ul>	3 days

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<b>Biorisk Management “Ops and SOPs”</b>	<p>Designed for biorisk management advisors and supervisory laboratorians (lab directors also invited)</p> <p>This is laboratory operations course designed to assess and review laboratory operations within a specific laboratory setting. Using GBRMC courses as a framework, students will assess the status of the laboratory’s biorisk, develop a biorisk mitigation strategy, develop or revise standard operating procedures (SOPs) for key procedures, and develop lab-level performance indicators and process (integrated into SOPs) for collecting metrics.</p>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Risk Characterization &amp; Evaluation</li> <li>• Risk Mitigation Strategies</li> <li>• Developing, evaluating, and validating standard operating procedures</li> <li>• 4 to 6 additional Lab Operational or Administrative Controls courses, based on perceptual survey and risk assessments</li> </ul>	<p>5 to 6 days</p> <p>2 days for first four courses; 3 to 4 days for specific courses and SOP development</p>
<b>Biorisk Management Training PLAN Development</b>	<p>This course is distinguished from the Trainers’ Development Program by the focus on developing and executing a training plan/strategy. Students do not need to be trainers but should be in a position to facilitate or oversee training programs.</p> <p>Students will use validated instructional design processes (ADDIE, etc.) to analyze training needs and constraints, to develop a plan for oversight of the design, development, and implementation of training components, and to use evaluation tools to monitor the effectiveness of the training plan. In addition, students will develop tools for assessment and evaluation of trainer qualifications, as well as the hiring (or assignment) of qualified trainers</p> <p>Follow-on activities will include training event reports and evaluations, in conjunction with use of needs assessment tools at 3 month, 6 month, and 1 year after implementation of the training plan.</p>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Biorisk Characterization &amp; Evaluation</li> <li>• Establishing and Communicating BRM roles, responsibilities, objectives, and goals</li> <li>• Considerations for Training in Biorisk Management</li> <li>• Measurement &amp; Analysis of Biorisk Management Performance</li> </ul>	<p>2 days</p>
<b>Infrastructure Assessment</b>	<p>Designed for top and scientific management and biorisk management advisors.</p> <p>Using GBRMC courses as a framework, students will both conceptually and physically assess the biorisk management status of laboratory facilities and equipment by designing and conducting an audit. Using the audit results, the students will develop roles, responsibilities, goals, objectives, and performance indicators for improving the BRM status of the facilities and equipment they audited.</p> <p>A follow-on activity will be another audit, as well as a report of performance metrics at 3 months, 6 months, and one year after the initial assessment.</p>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Biorisk Characterization &amp; Evaluation</li> <li>• Risk Mitigation Strategies</li> <li>• Understanding and Maintaining Facilities &amp; Equipment for Biorisk Management</li> <li>• Conducting Audits and Inspections To Assess Biorisk Management Performance</li> <li>• Establishing and Communicating BRM roles, responsibilities, objectives, and goals</li> </ul>	<p>2 to 3 days</p>

Training Focus	Description	GBRMC courses used	Length
<b>Human Capacity Assessment</b>	<p>Designed for top and scientific management and biorisk management advisors.</p> <p>Using GBRMC courses as a framework, students will conduct a risk-based assessment of the expertise, education, training, experience, and vulnerability of the biorisk management workforce needed to address safety, security, and science needs for their organization. Students will partially complete templates for hiring strategies, as well as job descriptions and performance expectations where biorisk management has been integrated, plans for assessing job performance relative to biorisk management, and establishing effective training and mentoring programs to enhance skills and desired behaviors that impact and influence biorisk management.</p> <p>Students will also assess the impact of, investigation of, and response to safety and security incidents involving especially dangerous pathogens where there is an apparent failure in human performance criteria, focusing particularly on utilizing already-established institutional resources to address highlighted deficiencies. The goal is to assume the best of workers, while being prepared for the worst.</p> <p>Execution of this course will require work with an SME in local human resources so that it can be customized so that it does not conflict with any local hiring laws or regulations, etc.</p> <p>A follow-on activity will be another audit, as well as a report of performance metrics at 3 months, 6 months, and one year after the initial assessment.</p>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Biorisk Characterization &amp; Evaluation</li> <li>• Managing human performance in the biorisk management workforce</li> <li>• Considerations for Training in Biorisk Management</li> <li>• Establishing and maintaining formal and informal biorisk management mentoring programs.</li> <li>• Incident Response &amp; Investigation</li> </ul>	2 to 3 days

Training Focus	Description	GBRMC courses used	Length
<b>Biosecurity Toolkit</b>	<p>This course is designed for any member of the workforce who has been assigned a role to assess or advise the organization regarding ongoing biosecurity vulnerabilities and mitigation strategies and the development of biosecurity roles, responsibilities, objectives, goals, and performance indicators.</p> <p>The centerpiece of the course is repeated vulnerability and risk assessments in response to different mitigation strategies and risk profiles.</p> <p>The “Toolkit” title reflects the set of tools that a student will be provided as well as training and testing to assure that they are able to use these tools. These tools include methods for conducting biosecurity vulnerability and risk assessments, developing policies and programs for integrated biosecurity mitigation strategies, audits and other performance indicators for assessing the ongoing status of a biosecurity program.</p>	<ul style="list-style-type: none"> <li>• Orientation to Biorisk Management</li> <li>• Biorisk Characterization &amp; Evaluation</li> <li>• Biosecurity Risk Assessment</li> <li>• Establishing and Communicating BRM roles, responsibilities, objectives, and goals</li> <li>• Biorisk Mitigation Strategies</li> <li>• Laboratory Biosecurity</li> <li>• (Field Biosecurity, if applicable)</li> <li>• Measurement &amp; Analysis of Biorisk Management Performance</li> <li>• Conducting Audits and Inspections To Assess Biorisk Management Performance</li> </ul>	3 to 5 days
<b>Veterinary/Field Biosafety and Biosecurity</b>	<p>This course is designed for personnel and their supervisors who require a basic biosafety and biosecurity background complemented with more detailed procedures and practices for work that is primarily completed in the field or in a veterinary setting. (Note: “Biosecurity” in this course refers to protection of biological materials from theft, loss, or misuse).</p> <p>The centerpiece of the course is a focus on basic biosafety and biosecurity practices followed by discussions and activities on how biosafety and biosecurity practices differ in the field and how to institute the practices that are most appropriate for field work.</p> <p>There is opportunity to customize the courses by using examples and activities specific to the locality and setting.</p>	<ul style="list-style-type: none"> <li>• Day 1 AM – Orientation to Biorisk Management</li> <li>• Day 1 PM – Biorisk Characterization &amp; Evaluation</li> <li>• Day 2 AM – Biorisk Mitigation Strategies</li> <li>• Day 2 PM – Field Biosafety</li> <li>• Day 3 AM – Basic Biosecurity Practices</li> <li>• Day 3 PM – Field Biosecurity</li> <li>• Day 4* – Shipping and Transport (with case studies from field collection examples)</li> <li>• Day 5 AM – Developing and Validating Standard Operating Procedures (SOPs)</li> <li>• Day 5 PM – Tabletop with relevant case studies or SOP development</li> </ul> <p>*if IATA certification in shipping is not required, this section can be reduced to a half-day and the afternoon used for the SOP course. Day 5 could then be used for both tabletop exercises and SOP development.</p>	5 days