



Request for Proposals (RFP): Course Programmer for Laboratory Curriculum Framework Courses

July 1, 2020

Submissions due to Robyn Randolph (Robyn.Randolph@aphl.org)

via: The Association of Public Health Laboratories, Inc.
8515 Georgia Avenue, Suite 700
Silver Spring, MD 20910

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Summary

The Association of Public Health Laboratories, Inc. (APHL or the Association), in collaboration with the US Food and Drug Administration (FDA) Office of Training Education and Development (OTED), the Association of Food and Drug Officials (AFDO), and the Association of American Feed Control Officials (AAFCO) is developing a Human and Animal Food Laboratory Professionals Curriculum Framework. APHL and its partners are creating courses based on the competencies developed on the curriculum framework. APHL is seeking a course programmer(s) for the development of online courses in Lectora Inspire 18.

Through this Request for Proposals (RFP), APHL seeks to identify a company or individual who can create a web-based course that meets the following requirements:

- Built in Lectora Inspire 18
- Meets 508 compliance standards
- Includes interactivities as indicated in storyboard
- Meets SCORM (Sharable Content Object Reference Model) compliance

Background

APHL is a non-profit organization that works to safeguard the public's health by strengthening public health laboratories (PHLs) in the United States and globally. APHL is organized under the laws of the United States of America's District of Columbia, with its headquarters office in Silver Spring, MD. The Association's members include state and local laboratories, state environmental and agricultural laboratories and other government laboratories that conduct testing of public health significance. APHL is recognized as tax exempt in the United States under Section 501(c)(3) of the U.S. Internal Revenue Code. Its work on behalf of public health labs spans more than 60 years.

In collaboration with its members, APHL advances laboratory systems and practices and promotes policies that support healthy communities globally. The Association serves as a liaison between the public health laboratories and federal and international agencies. It ensures that the network of public health laboratories has current and consistent scientific information in order to be ready for outbreaks and other public health emergencies.

The APHL Food Safety Program currently implements workforce development projects for human and animal food testing laboratories in the United States. APHL supports this initiative through an anticipated Cooperative Agreement with the FDA. APHL will update this RFP with more information once a Cooperative Agreement is awarded. APHL is working in coordination with other member-based organizations to develop a comprehensive, career-spanning curriculum framework for human and animal laboratory professionals, as well as develop training materials to deliver this information to laboratorians.

Eligibility

Interested parties must submit a proposal to APHL that provides all of the information specified in the Proposal Submission section below. In order to be considered for funding, an applicant must ensure APHL has its complete proposal by no later than the Proposal Due Date specified in the Anticipated RFP Schedule section below. Applicants will find proposal submission information in the Response Submittal section below.

Anticipated RFP Schedule

Applications are due to the individual(s) specified in the Final Response section of this **RFP by 5:00 pm Eastern Standard Time (EST) on August 3, 2020**. APHL anticipates the following schedule for the entire competitive bidding process:

July 1, 2020	APHL issues RFP
July 10, 2020	Letter of Intent due to APHL by 5:00 pm EST
July 17, 2020	Last day to submit questions (exceptions may be granted at APHL's sole discretion)
August 3, 2020	<i>Complete RFP responses due to APHL by 5:00 pm EST</i>
August 6, 2020	APHL completes the evaluation process and contacts winning/selected applicant(s)
August 7, 2020	APHL publicly announces the names of the selected applicant(s) on its procurement website, www.aphl.org/rfp
September 10, 2020	Anticipated start date of LCF course programming project

Response Submittal

Confirmation of Intent to Respond

APHL requests that prospective applicants submit a brief email statement indicating intent to submit a proposal by **no later than 5:00 PM EST on July 10, 2020**. The letter of intent should be emailed to Robyn.Randolph@aphl.org. While the letter of intent is not binding and does not enter into the review of the RFP, the information that it contains allows APHL's evaluation team to plan the contract development and review process. Potential applicants must include the name of the organization or individual that will submit the proposal in their email.

Final Response

APHL must receive a complete proposal by no later than **5:00 PM EST on August 3, 2020**. Applicants may send proposals by the following methods:

Via email to robyn.randolph@aphl.org; or

Via certified, registered or express mail through the postal service or via trackable mail delivery services provided by DHL, FedEx, and UPS, addressed to:

c/o Robyn Randolph
The Association of Public Health Laboratories, Inc.
8515 Georgia Avenue, Suite 700
Silver Spring, MD 20910

APHL will send an email acknowledging the receipt of your application. If you do not receive an acknowledgement within 48 hours, please email the points of contact below to confirm receipt.

Regardless of the delivery method, APHL must receive all responses by 5:00 PM EST. It is the applicant's responsibility to ensure that the proposal is received at APHL by this deadline.

APHL may terminate or modify the RFP process at any time during the response period.

Questions

Please direct all questions regarding this RFP or its application requirements via email to Robyn Randolph at robyn.randolph@aphl.org, with a copy to Catherine Johnson at catherine.johnson@aphl.org. A table of Frequently Asked Questions is included as Appendix C.

A member of APHL's Food Safety staff will respond directly to the questions on an individual basis as questions are received. While APHL will attempt to answer questions within one business day of receipt, additional time may be needed depending on the issue raised.

APHL should receive all questions by 5:00 pm EST on July 17, 2020. APHL is unlikely to answer any question received after this deadline, but it will have discretion to do so if APHL's Food Safety staff reasonably feel that the question raises a substantial issue that could affect multiple applicants, and may be answered without impacting the application submission and review process. Should APHL opt to answer any late questions, APHL will post the question and answer to APHL's procurement website and will not respond directly to the sender.

Scope and Approach

The organization or individual engaging in this project must provide the capabilities to work from the early stages of the course design through full development, including implementation and evaluation strategies.

APHL has included a sample Course Design Document (CDD) upon which this course will be based. The selected applicant(s) will program an online course, Basic Laboratory Math. Additional opportunities to complete programming for extra courses may exist as budget and time allow. A draft project approach is also included in this RFP and provides initial learning objectives and content overview. This material may be found in the following RFP attachments:

- [Appendix A: Basic Laboratory Math Course Design Document](#)
- [Appendix B: Draft project approach](#)

The applicant(s) will be expected to do the following for the Basic Laboratory Math Course:

1. Develop asynchronous, web-based courses based on APHL-supplied materials. The courses must meet the following requirements :
 - a. Be built in Lectora Inspire 18 (desktop). *Note: Online Lectora will not be accepted.*
 - b. Meet 508 compliance standards
 - c. Include interactivities as indicated in storyboard
 - d. Meet SCORM compliance
2. Develop courses that incorporate the following general layout.
 - a. Introduction
 - b. Pre-test (ungraded knowledge assessment) before each unit
 - c. Main content, consisting of 2 units with ungraded knowledge checks
 - d. Post-test (graded knowledge assessment) following each unit
 - e. Evaluation
3. Describe the course programmer's ability to program:
 - a. Graded free response knowledge checks
 - b. Animated demonstrations or narrated screenshot-walk through instructions
4. All materials must be developed within an FDA-branded Lectora file template. The course programmer will provide the Lectora file template.

APHL will provide all content for the courses and the applicant(s) will program the online courses based on provided materials.

Project Term and Award

APHL will deliver a written notice of award to the successful applicant(s). The successful applicant(s) will receive funding through a contract agreement with APHL up to a maximum amount of \$30,000 for the Basic Laboratory Math course. Programming for additional courses will be available as time and budget

allow. This figure includes course programming and does not include images, graphics and animations, which should be budgeted out separately.

APHL has responsibility for validating the accuracy and completeness of the content of the final products and all materials created.

The course should be delivered to APHL by January 30, 2021, with a final invoice received by February 28, 2021.

Proposal Submission

Guidelines and Required Information

The applicant must ensure that APHL receives its letter of intent and its complete response by the due dates set out in the Anticipated RFP Schedule above. *APHL's evaluation team will not review incomplete applications.*

No designated response format or outline exists for responding to this RFP. However, regardless of the chosen format, an applicant's proposal must be limited to 15 pages of narrative and visuals. If an application exceeds this 15-page limit, only the first 15 pages will be sent to the evaluation team and scoring will be based solely on the portion of the proposal submitted for review. An application should have a font size of 11 points or larger and page margins of at least 0.5 inches. [Appendix B: Project Approach](#) has been included to assist applicants in understanding the level of detail that APHL and partners have discussed in relation to this project.

Note: Neither the Cost Proposal described below nor anything included as an appendix will count as part of the 15-page count (material included as an appendix will only be used as reference material and will not be reviewed as part of the evaluation process).

The applicant must include the following in their 15-page response:

1. A company profile;
2. A description of two (2) past learning/development activities that best reflect the applicant's work and relevancy to this project. Examples of course materials, including links to active courses, may be included as an appendix. Activities should be linked to prior work experience rather than part of an educational requirement for a degree/education;
3. Reference information from two (2) former or current clients. Include company name; contact person's name; contact person's phone number and/or email address; and description of product delivered;
4. A description of the applicant's experience in programming web-based courses in Lectora Inspire 18 (desktop version) (examples may be included as an appendix);
6. A description of what type of team will be assigned to this project, including a description of each person's role (resumes or CVs should be provided as an appendix); and

7. A brief description of the applicant firm's project management and instructional development processes.

Cost Proposal

The applicant should provide a detailed cost proposal and explanation/justification of costs. The cost proposal must be no longer than three (3) pages. No required format exists for the cost proposal and the cost proposal should be submitted in the format of the applicant's choice.

The cost proposal should include the number of contract hours estimated to complete an online, web-based course, as described above. The costs should be broken into 1) course programming costs, including the hours required to develop the course and the hourly rate and 2) costs for purchasing and/or developing images, graphics and animations. The cost should include interactivities as indicated in the storyboard, but at least three interactivities per unit. The applicant should provide estimates of several types of interactivities (e.g. drag & drop). The interactivities must be developed by the applicant and not subcontracted out to another entity. APHL may require additional edits to be made after the course is delivered; applicants should include a line item in the budget proposal that includes an hourly rate to incorporate final edits. APHL has allocated up to \$30,000 for the course programming and additional funds may exist for interactivities. Development of animations should be quoted on an individual basis as a supplement to the programming of the course. The cost of animation development (simple animations v. complex animations) should be submitted with the cost for proposal.

[Appendix B: Project Approach](#) has been included to assist applicants in understanding the level of detail that APHL and partners have discussed in relation to this project. *Note:* Applicants are not required to use or reference anything outlined in Appendix B unless they would like to. APHL only provides this Appendix as supporting documentation.

Evaluation

Initial Review

APHL staff members or consultants under contract with APHL will conduct an initial review of all proposals for completeness. APHL will not consider any incomplete applications by the proposal due date specified in the Anticipated RFP Schedule section above. Incomplete proposals will not receive a formal evaluation.

Evaluation Process

APHL will conduct reviews via a combination of teleconference and email communications between the evaluation team described below. APHL's Food Safety Senior Specialist will coordinate the review process and the evaluation sessions.

The reviewers may request follow-up interviews with all or some of the applicants and, following these interviews, may request supplemental information on an applicant's proposal. These interviews and any supplemental information will clarify an applicant's capacity or experience in one or more of the evaluation criteria, or will help to explain other information contained in an applicant's proposal.

Evaluation Team

An evaluation team will be assembled to evaluate competitive proposals and then assess their relative qualities based on the Evaluation Criteria outlined below. This evaluation team will consist of four APHL staff.

Conflicts of Interest

APHL will ask potential reviewers to complete and sign APHL's **Conflict of Interest Disclosure Statement** in order to disclose any real or perceived conflict of interest prior to the start of the evaluation process and to affirm that they have no conflict of interest that would preclude an unbiased and objective review of the proposals received. APHL will not select reviewers with a perceived or potential conflict of interest. Once potential reviewers have been identified, APHL's Director of Food Safety will have final approval over the review team's composition.

Evaluation Criteria

The evaluation team will use the following criteria as a general overall framework in which to evaluate proposals:

- *Suitability of the Proposal* – The proposed solution meets the needs and criteria set forth in the RFP.
- *Course Programmer Expertise* – The applicant shows knowledge of the subject by recommending and communicating appropriate technical and aesthetic solutions as evidenced by the proposal and references.
- *Course Programmer Organizational Capacity* – Applicant has successfully completed similar projects and has the qualifications necessary to undertake this project. The applicant firm has appropriate staff to devote to the project within the timeframe needed.
- *Project Management*- The applicant shows experience and resources related to successful completion of a similar project.
- *Value/Pricing Structure and Price Levels* – The price is commensurate with the value offered by the applicant.

Each member of the evaluation team will evaluate proposals against the 13 questions or criteria found in Appendix D: Instructional Designer RFP Scorecard and will assign a numeric score from zero (0) (indicating a 'poor' response) to four (4) (indicating an 'outstanding' response) to reflect that reviewer's assessment of the responsiveness of a proposal to each question or criterion. The evaluators will assign scores using the following categorizations:

- *Poor* (0 points) – The respondent’s proposed approach neither meets the baseline requirements set out in this RFP nor demonstrates more than a minimal understanding of the subject matter.
- *Fair* (1 point) – The respondent’s proposed approach does not meet the baseline requirements set out in this RFP but does demonstrate a baseline understanding of the subject matter.
- *Good* (2 points) – The respondent’s proposed approach meets the baseline requirements set out in this RFP and demonstrates the necessary understanding of the subject matter.
- *Excellent* (3 points) - The respondent’s proposed approach exceeds the baseline requirements set out in this RFP and demonstrates a deep understanding of the subject matter.
- *Outstanding* (4 points) - The respondent’s proposed approach greatly exceeds the baseline requirements set out in this RFP and demonstrates a thorough and comprehensive understanding of, or an expertise in the subject matter.

The raw scores will be weighted in such a manner so that the 52 maximum possible raw score points will be converted into a maximum possible weighted score of 100 points.

Post Evaluation Procedures

APHL staff will notify the selected course programmer(s) within ten (10) business days of completion of the evaluation. Unsuccessful applicants will receive notification of these results by e-mail or by U.S. mail within 30 days of the date that the winning/successful vendor is selected. Note: Once selected, the applicant must be approved by the federal funding agency.

All applicants will be entitled to utilize APHL’s Appeals Process to formulate a protest regarding alleged irregularities or improprieties during the procurement process. Specific details of the policy are listed on the procurement website.

Conditions of Award Acceptance

The eligible applicants must be able to contract directly with APHL or have an existing relationship with a third party organization that can contract directly with APHL on behalf of the applicant. Applicants must agree to comply with expectations outlined in the appendices.

General Considerations

This RFP is neither an agreement nor an offer to enter into an agreement with any respondent. Once application evaluation is complete, APHL may choose to enter into a definitive contract with the selected applicant(s) or it may decline to do so.

APHL must ensure that the selected respondent is neither suspended nor debarred from receiving federal funds and that the respondent meets any other funding eligibility requirement imposed by the Cooperative Agreement. APHL’s determination of whether the respondent is eligible to receive

Cooperative Agreement funding will be definitive and may not be appealed. In the event that APHL determines that the selected respondent is ineligible to receive Cooperative Agreement funding, APHL will nullify the contract or will cease negotiation of contract terms.

Each respondent will bear its own costs associated with or relating to the preparation and submission of its application. These costs and expenses will remain with the respondent, and APHL will not be liable for these or for any other costs or other expenses incurred by a respondent in preparation or submission of its application, regardless of the conduct or outcome of the response period or the selection process.

Appendix A – Basic Laboratory Math Course Design Document

Title	Basic Laboratory Math
Proposed ID	Course Code TBD
Date and Version	09/30/19 version 1
Description	This course teaches the analyst mathematical concepts commonly used in the laboratory including laboratory vocabulary related to portions and for the assessment of data sets, the meaning of symbols and acronyms and the concepts inherent in performing unit of measure conversions and link experimental uncertainty to rounding rules.
Delivery Method(s)	Online

Learning Objectives

The following is a complete listing of the Terminal Learning Objectives (TLOs) and Enabling Learning Objectives (ELOs), which will be broken out by module/lesson in the course design details section that follows.

Terminal Objectives	Enabling Objectives
1: Upon completion of the unit, given the contents of the unit, participants will recall laboratory math vocabulary.	1a: Upon completion of the unit, participants will define mathematical terminology 1b: Upon completion of the unit, participants will recognize how symbols are used in a mathematical operation 1c: Upon completion of the unit, participants will apply exponents/logarithms 1d: Upon completion of the unit, participants will define acronyms.
2: Upon completion of the unit, given the contents of the unit, participants will perform laboratory calculations using basic mathematical concepts.	2a: Upon completion of the unit, participants will apply order of operations conventions 2b: Upon completion of the unit, participants will report test results with significant figures 2c: Upon completion of the unit, participants will report test results with rounding

Lesson/Module Number and Title: Math vocabulary used in the laboratory				
Description: This unit will discuss mathematical terminology and vocabulary used in a food safety laboratory. It will include symbols and acronyms and the use of exponents.				
Lesson/Module TLO 1: Upon completion of the unit, participants will recall laboratory math vocabulary.				
Pre-Post Module Lesson Work: N/A				
Learning Environment: web based				
Need, Content, Description or Purpose – N/A (No Training Needs Assessment Performed)				
Lesson/Module ELOs	Time Estimate	Instructional Methodology - Level of Participant Interactivity/Engagement	Instructional Materials	Assessment Method and Performance Criteria
<p>Upon completion of the course, participants will:</p> <ul style="list-style-type: none"> • Define mathematical terminology • Recognize how symbols are used in a mathematical operation • Apply exponents/logarithms • Define acronyms 	.25 hr	Asynchronous, online with knowledge checks	Computer with web browser, internet connection and a learning management system account	<p>Multiple choice/check all that apply knowledge check quiz</p> <p>1a. Choose the correct definition of Percent</p> <p>A. is a number expressed as a fraction of 100. ***</p> <p>B. a quantity calculated to indicate the extent of deviation for a group as a whole.</p> <p>C. A comparative statistic used to calculate precision or random error.</p> <p>1a. Choose the correct definition for each term.</p> <p>A. Avogadro's number</p> <p>B. Molarity (M)</p> <p>C. Equivalent Weight (EW)</p> <p>D. Normality (N)</p> <p>E. Molality</p>

			<p>A. The number of constituent particles that are contained in one mole</p> <p>B. The number of moles of solute per liter of solution</p> <p>C. Atomic or molecular weight divided by n where n is the number of electrons or protons transferred in reaction (i.e. The number of ions a molecule transfers, or the valence state of an element or compound)</p> <p>D. The number of equivalent weights of solute per liter of solution. $N=M*n$</p> <p>E. The number of moles of solute per kilogram of solution</p> <p>1a. Chose the correct definition of a constant</p> <p>A. A constant is a value that doesn't change. ***</p> <p>B. A quantity which has no fixed value but takes on various numerical values</p> <p>C. The letters x, y and z</p> <p>1a. Chose the correct definition of a variable</p> <p>A. an unknown value or a value that can change. ***</p> <p>B. All integers</p> <p>C. ?</p>
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				<p>D. A symbol which has a fixed numerical value.</p> <p>1a. Choose the correct definition of a logarithm</p> <p>A. The number of constituent particles that are contained in one mole</p> <p>B. a quantity representing the power to which a fixed number (the base) must be raised to produce a given number. **</p> <p>C. The ratio of a circle's circumference to its diameter</p> <p>1b. Match the symbol to the operation.</p> <p>×</p> <p>*</p> <p>·</p> <p>÷</p> <p>a/b</p> <p>a/b</p> <p>+</p> <p>-</p> <p>√</p> <p>x^n</p> <p>x^2</p> <p>√(n&x)</p> <p>$\sqrt[n]{x}$</p> <p>(-)</p> <p>[-]</p> <p>Multiplication</p> <p>Multiplication</p> <p>Multiplication</p> <p>Division</p>
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			<p> Division Division Addition Subtraction Square Root Exponent to the nth power X Squared nth root Cube root Parenthesis Brackets </p> <p> 1b. Match the symbol to the meaning \pm (plus or minus) \leq (less than or equal to) \geq (greater than or equal to) \cong (approximately equal to) \neq (does not equal) $<$ (less than) $>$ (greater than) </p> <p> 1c. In the logarithmic expression $\log_2(16) = 4$: What is the base? </p> <p> 2c. In the logarithmic expression $\log_2(16) = 4$: What is the logarithm? </p> <p> 1b. Match each SI unit with the category measured. A. Meter B. Kilogram C. Second D. Kelvin E. Ampere </p>
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				<p>F. Mole G. Candela</p> <p>A. Length B. Mass C. Time D. temperature E. Current F. Amount of a substance G. Luminous intensity</p> <p>1d. Match each SI unit with its abbreviation.</p> <p>A. Meter B. Kilogram C. Second D. Kelvin E. Ampere F. Mole G. Candela</p> <p>A. m B. kg C. s D. K E. A F. mol G. cd</p> <p>1b. What is another way to express 0.0004 mg/L?</p> <p>A. 4 µg/L B. 40 µg/L C. 0.4 µg/L* D. 400 µg/L E. 0.004 µg/L</p> <p>1d. Match each acronym with its definition. A. CFU B. MPN A. In microbiology, a colony-forming unit is</p>
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				<p>a unit used to estimate the number of viable bacteria or fungal cells in a sample.</p> <p>B. Method used to estimate the concentration of viable organisms by means of replicate broth growth in 10 fold dilutions</p> <p>1c. Convert 56,000,000 to scientific notation</p> <p>5.6x 10^{7**}</p> <p>5.6x 10^{-9}</p> <p>5.6x 10^{-7}</p> <p>5.6x 10^4</p> <p>5.6x 10^{-4}</p> <p>1c. Convert 0.00056 to Scientific notation</p> <p>5.6x 10^7</p> <p>5.6x 10^{-9}</p> <p>5.6x 10^{-7}</p> <p>5.6x 10^4</p> <p>5.6x $10^{-4}**$</p> <p>1b. Match each prefix with the appropriate value.</p> <p>Tera</p> <p>Giga</p> <p>Mega</p> <p>Kilo</p> <p>Hecto</p> <p>Deka</p> <p>Deci</p> <p>Centi</p> <p>Milli</p> <p>Micro</p> <p>Nano</p>
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				Pico [[10]] ^12 [[10]] ^9 [[10]] ^6 [[10]] ^3 [[10]] ^2 [[10]] ^1 [[10]] ^(-1) [[10]] ^(-2) [[10]] ^(-3) [[10]] ^(-6) [[10]] ^(-9) [[10]] ^(-12)
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Lesson/Module Number and Title: Basic mathematical concepts used for science				
Description: This unit will describe basic mathematical concepts. It will cover the conventions of order of operations, and how to report correct test results by applying rounding and significant figures.				
Lesson/Module TLO: Upon completion of the unit, participants will perform laboratory calculations using basic mathematical concepts.				
Pre-Post Module Lesson Work: N/A				
Learning Environment: web based				
Need, Content, Description or Purpose – N/A (No Training Needs Assessment Performed)				
Lesson/Module ELOs	Time Estimate	Instructional Methodology - Level of Participant Interactivity/Engagement	Instructional Materials	Assessment Method and Performance Criteria
<p>Upon completion of the course, participants will:</p> <ul style="list-style-type: none"> • Apply order of operations conventions • Report test results with significant figures • Report test results with rounding 	.25 hr	Asynchronous, online with knowledge checks	Computer with web browser, internet connection and a learning management system account	<p>Multiple choice/check all that apply knowledge check quiz</p> <p>2a. Following the rules of arithmetic operations, which operation would you do first for the following equation?</p> $Co = (Fo - 32) \times 5/9$ <p>a. Calculate the value within the parentheses***</p> <p>b. Divide 5/9 and multiple by the temperature Fo</p> <p>c. Multiply Co by 5/9</p> <p>Multiply 32 x 5 and divide by 9</p> <p>2a. Perform the following calculation</p>

				<p>using order of operations.</p> <p>$2 + 3 \times 4$</p> <p>a. 20</p> <p>b. 14*</p> <p>c. 12</p> <p>d. 22</p> <p>2a. Perform the following calculation following order of operations conventions.</p> <p>$20 \times 2 - (1/2) \times 9.8 \times 22$</p> <p>a. 1,548.4</p> <p>b. 20.4</p> <p>c. 14,974.4</p> <p>d. 3,136</p> <p>e. 1,176</p> <p>2b. What are significant figures?</p> <p>a. The digits in a number (value) that contribute to accuracy.</p> <p>b. The number of decimal places in a result that are known precisely.</p> <p>c. The digits of a number that carry meaning</p>
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				<p>in a measurement</p> <p>d. All of the above***</p> <p>2c. Round the following numbers to the nearest integer.</p> <p>a. 753.2</p> <p>3</p> <p>b. 826.9</p> <p>9</p> <p>c. 555.5</p> <p>5</p> <p>d. 467.5</p> <p>0</p> <p>e. 62.2</p> <p>48.5</p> <p>a. 753</p> <p>b. 827</p> <p>c. 556</p> <p>d. 468</p> <p>e. 62</p> <p>f. 48</p> <p>2b. Your method has a precision of 10%. Express the following results with the proper number of significant figures.</p> <p>a. 9999.9999</p> <p>b. 999.9999</p> <p>c. 99.9999</p> <p>d. 9.9999</p> <p>e. 0.9999</p>
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				<p>f. 0.0999 g. 0.0099 0.0009</p> <p>a. 10,000 b. 1,000 c. 100 d. 10 e. 1.0 f. 0.10 g. 0.010 h. 0.0010</p> <p>2b. For the following, indicate the number of significant figures:</p> <p>a. 0.055 g b. 6.300 mL c. 0.010040 mg/kg d. 99.9999 cfu 230 L</p> <p>a. 2 b. 4 c. 5 d. 6 e. 3</p>
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Appendix B – Project Approach

To help frame the required level of detail, respondents should be thinking about the information below as they provide their estimates on cost, deliverables and proper staffing.

NOTE: RESPONDENTS DO NOT HAVE TO USE OR REFERENCE THIS INFORMATION, IT IS ONLY INCLUDED AS A GUIDANCE RESOURCE.

1. Review of course design document and supporting materials:

As is apparent in Appendix A, APHL and partners have created a course design document that outlines the flow of the to-be-developed course. Storyboards are in development for the course, and the course programmer should be prepared to review these materials.

2. Creation of a project plan and timeline:

With enough information generated from task #1, the course programmer should prepare a plan and timeline for the programming and delivery. Minor adjustments in the proposed costs and resources can occur at this time.

3. Program and deliver the Course:

The course programmer will undertake development of the course with APHL provided content and input.

Appendix C – Frequently Asked Questions

Category	Question	APHL Response
CDD / Storyboard	Will the CDD and/or Storyboard have been approved by the FDA prior to course development? Have the SMEs produced content for APHL and FDA reviewers in the past?	The CDD has been approved by FDA. The SMEs have produced content for APHL and FDA reviewers in the past.
CDD / Storyboard	Appendix B, section 1 indicates that your team is currently developing a storyboard for this course. Will the approved storyboard contain the desired narration scripting, or will the programming team be expected to work with your team to develop and draft a narration script?	If necessary, the storyboard will contain the desired narration scripting.
CDD / Storyboard	Are the storyboards basically text in Word format or are they chunked out by slide as in PowerPoint?	Word format
CDD / Storyboard	<p>It's mentioned in Appendix B that "storyboards are in development ..."</p> <ol style="list-style-type: none"> a. What form are the storyboards in – PPT, Word or ? b. In addition to the content text, what will the storyboards contain? <ol style="list-style-type: none"> i. Images, graphics with associated alternative text to use? ii. Narration scripts for professional narrations? iii. Descriptions of interactivities for programmer to create? c. If some of these are not contained w/in the 	<ol style="list-style-type: none"> a. What form are the storyboards in – PPT, Word or ? Word b. In addition to the content text, what will the storyboards contain? <ol style="list-style-type: none"> i. Images, graphics with associated alternative text to use? Yes ii. Narration scripts for professional narrations? Yes (if applicable) iii. Descriptions of interactivities for

Category	Question	APHL Response
	<p>storyboard, is the programmer expected to develop them?</p>	<p>programmer to create? Yes</p> <p>c. If some of these are not contained w/in the storyboard, is the programmer expected to develop them? No</p>
CDD / Storyboard	Do the storyboards include all of the content text, images and/or descriptions of images, and any voice over script that is in addition to the text on the slide?	Yes.
CDD / Storyboard	The CDD would seem to indicate a linear learning experience without branching or role-specific differentiation, is that an accurate assumption?	Yes
CDD / Storyboard	Is the team open to possibly breaking up the 1-hour learning program into 3 or 4 shorter, more digestible modules?	The storyboard will include a set number of units.
Compliance for 508 / Templates	Can describe your approach to meeting 508 compliance? For example, do you require true closed captioning or display of slide-level scripting in a viewable pane?	<p>Closed captioning is required for all videos. When making any course, the developer should be following section 508 standards. For additional information, link is below. Section 508 Standards for Electronic and Information Technology: https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards/section-508-standards</p>
Compliance for 508 / Templates	Please confirm that APHL will be providing a Lectora 18 template that already meets Section 508 standards.	No, APHL expects that the awardee will provide a Lectora 18 template that meets Section 508 standards.
Compliance for 508 / Templates	Will the Lectora template need to be appropriately sized for use on tablets?	At this time, the answer is yes

Category	Question	APHL Response
Compliance for 508 / Templates	Will APHL also be providing a style guide containing appropriate branding elements which meet Section 508 standards?	Yes, APHL will provide this.
Course assets	Are there assets you would like designed and developed that learners can download during or after the course (e.g. job-aids, quick reference cards, etc)?	Not at this time.
Course delivery	<p>How will the course be delivered online?</p> <ul style="list-style-type: none"> a. Windows-based desktop/laptop? b. Tablet – Windows or Android or iOS? c. Smart phone – Android or iOS? – Do you need a mobile version? 	<ul style="list-style-type: none"> a. Windows-based desktop/laptop? Yes b. Tablet – Windows or Android or iOS? Yes c. Smart phone – Android or iOS? – Do you need a mobile version? No
Deliverables Timeline / Review	Please provide an overview of the review or approval cycle of any deliverables we provide. Can you provide typical or average deliverable review times so we may take them into consideration?	We have built a one-week review on our end for beta-testing the course. We will then send it for FDA review. If additional edits are needed past the deliverable deadline, we will allow for a No Cost Extension on the contract to make those edits.
Delivery system / LMS	Does APHL have an intended learning management system in mind for hosting the eLearning course?	We plan on this course running on FDA's LMS. We are to have the course programmed in Lectora 18 Inspire (desktop version). We want individual SCORM files. As of this date, the course would be programmed modularly, where the major components (introduction, pre course assessment, content, post course assessment, evaluation, etc.), are individual SCORM files.
Images	Is the programmer expected to research and find appropriate stock images? Or will APHL provide them?	The programmer is expected to find appropriate stock images which APHL will approve.

Category	Question	APHL Response
Interactions / Animations	Please clarify the difference between interactivity and animation. For example, we consider an interaction depending on a user response, whereas an animation is passively watched. Is that your definition as well?	Yes, that is how we are distinguishing the two terms.
Interactions / Animations	To help with the clarification, please share examples of interactions and animations you think are particularly effective.	We are interested in seeing some of your examples, as stated in the RFP.
Interactions / Animations	Under cost proposal, it's stated, "The cost should include up to three interactivities." Is this referring to the programming cost proposal?	Yes—the interactivities should be included in the programming cost.
Interactions / Animations	Can you please clarify? Are up to 3 interactivities part of the funds up to \$50K, or additional?	There are to be up to 3 interactivities in the course as part of the cost. Animations will be charged out separately
Interactions / Animations	Will the storyboard call for live-action video to be filmed and produced? If so, can you describe what kind of scenes and their estimated duration? Will pre-existing video assets be embedded?	There may be short videos, 15-30 seconds. The video would be in the course and not a link to an external site.
Review / Quality assurance	Based on verbiage in the RFP, we assume that the course content will be complete – the developer would not be responsible for review/quality assurance of the content – correct?	The developer would not be responsible for review of the content. The developer would be responsible for ensuring that spelling and punctuation is correct in the course. E.g. If the spelling and punctuation is placed in the course in the same state as in the storyboard.
Review / Quality assurance	Will input/feedback/approval by an individual, for example the project manager, or will it be via a committee conveyed through the project manager?	Feedback will come from the project manager who will compile the comments/edits from the SME workgroup. Final approval will be

Category	Question	APHL Response
		from APHL project manager based on OTED approvals.
Subject matter experts (SME)	What is the availability of APHL's SME? Would that person be available for one or two meetings of one to two hours each?	We are contracting with 7 SMEs that developed this content and will be available for meetings as you outlined here.
Translation	Will the course need to be translated?	No.

Appendix D– Course Programmer RFP Scorecard

The following table is a copy of the scorecard that will be used to evaluate RFP responses.

Scoring:	Poor: 0	Fair: 1	Good: 2	Excellent: 3	Outstanding: 4
Category	Criteria	Score	Comments		
Suitability of the Proposal: Does the applicant's proposal demonstrate an understanding of the operational need of the project and follow application instructions?	To what degree did the applicant's proposal meet the overall objectives of the project?				
	Did the applicant follow instructions - i.e., stay in page count, include required information?				
	Is the information presented in a clear, logical manner and well organized?				
	Did the applicant provide references for two former or current clients?				
	Section Total				
Course Programmer Expertise: Does the applicant's proposal demonstrate sufficient experience in course design and development to serve as the instructional designer?	Did the applicant list and articulate two past learning and development activities they produced that best reflect their work and relevancy to this project? Are the activities articulated at a quality level that APHL seeks?				
	Did the applicant thoroughly explain and have experience in programming web-based courses?				
	Is the applicant's existing knowledge and experience in this field as described in the proposal relevant to the project? (i.e. provided company profile, length of time in business and experience) <i>(designing and developing competency-based training)</i>				
	Section Total				
Course Programmer Organizational Capacity: Does the applicant have the appropriate staff to develop the product in the time frame needed?	Does the applicant have organizational capacity to produce the web-based courses?				
	Did the applicant outline an appropriate team to work on this project?				
	Section Total				
Project Management: Does the applicant have experience in project management?	Does the applicant demonstrate project management experience relevant to completion of international program of this magnitude?				
	Does the applicant have instructional development processes in place to achieve program goals according to a set schedule?				
	Section Total				

Value/Pricing Structure and Price Levels: Is the price commensurate with the value offered by the applicant?	Did the applicant hold some level of reasonable accuracy for time and cost based on the provided course design document and course layout?		
	Section Total		
	Total Score		