

INSTRUCTIONAL MATERIALS PUBLISHERS

Bid Item

Course: Biology 1 (2000310)
Title: HMH Florida Biology , Edition: First
Copyright: 2019
Author: Nowicki, et al
Grade Level: 9 - 12

Publisher Questionnaire

AUTHORS & CREDENTIALS: LIST FULL NAME OF AUTHOR(S), WITH MAJOR OR SENIOR AUTHOR LISTED FIRST. BRIEFLY PROVIDE CREDENTIALS FOR EACH AUTHOR.

Stephen Nowicki, Ph.D. Stephen Nowicki grew up with a strong interest in music and at one time wanted to be a classical musician. A biology course in college sparked his excitement for biology, leading him to major in both biology and music. Nowicki obtained his bachelor's and master's degrees from Tufts University. He received his doctorate in neurobiology and behavior from Cornell University in 1985. Nowicki is now Dean and Vice Provost for Undergraduate Education, as well as Bass Fellow and Professor in the departments of Biology, Psychology, and Neurobiology at Duke University. He has taught at Duke since 1989, where he directed a complete redesign of the introductory biology program. Nowicki's research explores animal communication and sexual selection from an integrative perspective that includes a wide range of behavioral, ecological, neuroethological, developmental, genetic, and evolutionary approaches. Birds are a common model system for his work, but he and his students also have worked with insects, spiders, shrimp, lobsters, lizards, and primates. Nowicki's research has been published in more than 95 articles in scientific journals, including Science, Nature, and Proceedings of the National Academy of Sciences. He coauthored the book The Evolution of Animal Communication: Reliability and Deception in Signaling Systems and is the author of a video lecture series based on the introductory biology course he taught at Duke. In 2010, he was elected a Fellow of the American Association for the Advancement of Science.

STUDENTS: DESCRIBE THE TYPE(S) OF STUDENTS FOR WHICH THIS SUBMISSION IS INTENDED.

HMH Florida Biology © 2018 is a core science curriculum designed for all learners in the high school general education setting, including those who perform on grade level, below grade level, and above grade level, as well as English Language Learners.

1. LIST THE FLORIDA DISTRICTS IN WHICH THIS PROGRAM HAS BEEN PILOTED IN THE LAST EIGHTEEN MONTHS.

This program is brand new and has not been adopted in other states as of this time.

2. HOW ARE YOUR DIGITAL MATERIALS SEARCHABLE BY FLORIDA STATE STANDARDS (SECTION 1006.33(1)(E), FLORIDA STATUTES)?

HMH Florida Biology is a comprehensive science curriculum designed specifically for Florida. Built to meet 100% of the Next Generation Sunshine State Standards (NGSSS), HMH Florida Biology delivers unparalleled learning experiences shaped by the Big Ideas of the NGSSS. Full-text standards correlations and standards citations are provided in the print and digital Teacher Edition, Student Edition, print and digital lesson planning tools, and online assessment reports. With this Florida-specific curriculum, teachers can easily and quickly track standards coverage and progression – the information is already organized into the HMH Florida Biology print and digital materials.

3. IDENTIFY AND DESCRIBE THE COMPONENTS OF THE MAJOR TOOL. The Major Tool is comprised of the items necessary to meet the standards and requirements of the category for which it is designed and submitted. As part of this section, include a description of the educational approach of the submission.

Educational Approach (The information provided here will be used in the instructional materials catalog in the case of adoption of the program. Please limit your response to 500 words or less.)

HMH Florida Biology is a comprehensive science curriculum designed specifically for Florida. Built to meet 100% of the Next Generation Sunshine State Standards (NGSSS), HMH Florida Biology delivers unparalleled learning experiences shaped by the Big Ideas of the NGSSS. With inquiry, critical thinking, and problem-solving as its framework, HMH Florida Biology raises levels of involvement and interest through HTML5-formatted interactive texts, dynamic resources, and a mixture of hands-on and virtual learning experiences. The Florida Standards Guide provides supplemental student activities that directly address each of the Florida standards for biology. With fresh activities in the Engineering Design Guide, students actively engage in the Engineering Design Process and the Disciplinary Core Idea (DCIs), Science and Engineering Practices (SEPs), and Crosscutting Concepts (CCCs). Integration of the three dimensions is especially evident in the labs component. Along with the program's suite of traditional hands-on labs, students can experience labs that they may not be able to under normal classroom conditions. The HMH Florida Biology program's Virtual Labs give students a state-of-the-art virtual lab experience, without any need for materials, set-up, or advance planning. Students can play and replay the Virtual Labs, simulations, and animations at their own pace to enhance their comprehension. All of the program's labs are organized by chapter, available online, and editable. Students develop enhanced conceptual understanding through the HMH Florida Biology

program's multiple representations of the content. Students connect to the captivating narrative that capitalizes on real-world scenarios, while vibrant visuals and animations like Animated Biology, PhET Simulations, Virtual Investigations, and BioZine bring concepts to life. Students can play and replay the Virtual Labs, simulations, and animations at their own pace to enhance their comprehension. Each chapter also includes an Interactive Concept Map, which challenges students to complete an interactive advanced organizer that shows the connections among the concepts covered. Exploration, engagement, and curiosity continue with dynamic components such as Google Expeditions virtual reality field trips, On the Job STEM career-related videos, and Thing Explainer comic strips by Randall Munroe of xkcd webcomics fame. These features of HMH Florida Biology not only spark discussions, they also inspire students on their path to college and careers. The program includes superior levels of reading support, as well as challenging Pre-AP material, so all learners can have meaningful and successful connections with the core content.

Major Tool - Student Components Describe each of the components, including a format description.

Student Edition • Student Edition: Print edition: The HMH Florida Biology print Student Edition is well-organized, visually appealing, and easily portable. This core text is a hardcover book with full-color pages. The reader-friendly layout includes manageable chunks of text, vibrant images that directly connect to the lesson content, and helpful headings. • Student Edition: Online interactive edition: The HTML5-formatted HMH Florida Biology Student Edition invigorates learning by delivering a completely interactive experience. The online interactive textbook includes an embedded natural-voice text reader, an interactive table of contents, and numerous embedded lesson-specific materials and multimedia features that can be launched directly from the lesson pages. Tools for note-taking, highlighting, annotating, and bookmarking are built into the online interactive textbook. • Student Edition: HMH eTextbooks App: An offline-ready version of the HMH Florida Biology Student Edition is available in downloadable EPUB3 format from the HMH eTextbooks App. This digital version of the print textbook delivers increased portability and embedded interactive features for use on desktops, laptops, Chromebooks, and Apple and Android tablets. The Student Edition from the HMH eTextbooks App include links to resources at point-of-use and digital note-taking, highlighting, and annotation tools. Additional information about the HMH eTextbooks App is at <http://www.hmhc.com/classroom/classroom-solutions/digital-and-mobile-learning/hmh-etextbooks>. • Student Edition: Downloadable PDF: A downloadable PDF of the print version of the HMH Florida Biology Student Edition is available from HMH's online platform. It can be downloaded to any compatible device for offline use. • Student Edition: Common Cartridge: HMH Florida Biology is also available in the IMS Global Common Cartridge Standard. This offering combines the high-quality curriculum with the IMS interoperability standards to deliver digital content that can be accessed in an IMS-conformant Learning Management System (LMS). The content in Common Cartridge consists of digital components such as the online textbooks and resources. It is all packaged for maximum flexibility to allow for individualization that meets the needs of all students. Houghton Mifflin Harcourt's Common Cartridge delivers the quality, consistency, reliability, and flexibility that optimize students' digital learning experience. Information about Common Cartridge is available at <http://www.hmhc.com/classroom/classroom-solutions/digital-and-mobile-learning/common-cartridge>. Test Prep • Florida Biology 1 End-of-Course Assessment Review and Practice Student Book (PDF and print): This resource prepares students for the content and format of Florida's state test. Full-length practice assessments are also included.

Major Tool - Teacher Components Describe each of the components, including a format description.

Teacher Edition • Teacher Edition: Print edition: The HMH Florida Biology print Teacher Edition is well-organized, easily portable, and teacher-friendly. This hardcover text provides high-quality instructional support, robust differentiation, strategies and activities for all levels and styles of learners, and structured support for labs. • Teacher Edition: Online interactive edition: The HTML5-formatted HMH Florida Biology Teacher Edition enhances instruction and includes layers of support built into every page. The online interactive textbook has an interactive table of contents, lesson-specific professional development supports, and resources and multimedia features that can be launched directly from the lesson pages. Tools for note-taking, highlighting, annotating, and bookmarking are built into the online interactive textbooks. • Teacher Edition: Downloadable PDF: A downloadable PDF of the print version of the HMH Florida Biology Teacher Edition is available from HMH's online platform. It can be downloaded to any compatible device for offline use. • Teacher Edition: Common Cartridge: HMH Florida Biology is also available in the IMS Global Common Cartridge Standard. This offering combines the high-quality curriculum with the IMS interoperability standards to deliver digital content that can be accessed in an IMS-conformant Learning Management System (LMS). The content in Common Cartridge consists of digital components such as the online textbooks and resources. It is all packaged for maximum flexibility to allow for individualization that meets the needs of all students. Houghton Mifflin Harcourt's Common Cartridge delivers the quality, consistency, reliability, and flexibility that optimize students' digital learning experience. Information about Common Cartridge is available at <http://www.hmhc.com/classroom/classroom-solutions/digital-and-mobile-learning/common-cartridge>. Test Prep • Florida Biology 1 End-of-Course Assessment Review and Practice Teacher's Guide (PDF and print): This resource offers professional guidance and answer keys that correspond

4. IDENTIFY AND DESCRIBE THE ANCILLARY MATERIALS. Briefly describe the ancillary materials and their relationship to the major tool.

Ancillary Materials - Student Components Describe each of the components, including a format description.

Hands-On & Student Labs • QuickLabs (Word, PDF) allow students to encounter key concepts in the classroom. • Open Inquiry Labs (Word, PDF) require students to drive the lab activity, making decisions about topics to research and their research processes and methods. • STEM Labs (Word, PDF) incorporate team inquiry methodologies, the Engineering Design Process, and promote multimodal learning. • Core Skill Labs (Word, PDF) give students practice with hands-on skills and techniques. • Probeware Labs (Word, PDF) integrate Vernier electronic data-collection technology into exciting activities that enhance hands-on learning. • Challenge Labs (Word, PDF) extend students' understanding and lab expertise with advanced techniques, equipment, and content. • Virtual Labs deliver multimedia representations of investigations and experiments that typically could not be performed in a school lab setting. • Virtual Investigations and Video Labs: The Virtual Investigations and Video Labs are engaging presentations, interactive activities, and simulated scientific investigations. Animations, Simulations, & Videos • Animated Science (HTML5): This digital resource provides nearly 100 animations and simulations that bring biology concepts and principles to life. • Interactive Demonstrations (HTML5): These show students problem-solving techniques in action and give them extra practice. • PhET Simulations (HTML5): Online interactive science simulations produced under Creative Commons licensing by the University of Colorado at Boulder. • On the Job STEM videos (mp4): Each 4- to 5-minute episode (29 episodes in all) of On the Job follows real professionals in growing fields of science, technology, engineering, and math at some of the most exciting companies in the country. • Why It Matters videos (mp4): These 17 videos engage students by making real-world connections to classroom content. • That's Amazing! Video-Based Inquiry (HTML/mp4): These activities engage students by following author and research scientist, Dr. Mike Heithaus, around the globe on his explorations. • Google Expeditions (VR/HTML and Javascript coding): In partnership with Google, HMH

brings you virtual reality field trips that immerse students in captivating 3D, 360-degree panoramic explorations. Reading & Comprehension Supports

- Interactive Reader (print consumable and digital PDF): This workbook delivers essential lesson content with text that is written at two grade levels below and includes scaffolded Skill Builder pages and graphic organizers.
- Interactive Concept Maps (HTML5): Included in each chapter strengthen students' learning through the use of advanced organizers.
- Florida Standards Guide
- Florida Standards Guide (PDF, print): The Florida Standards Guide provides supplemental student activities that directly address each of the Florida standards for biology.
- Engineering Design Guide
- Engineering Design Guide (PDF, print): Provides an overview of the Engineering Design Process.
- Student Resources
- PDFs on the platform: The HMH Florida Biology program includes PDF versions of activities and worksheets.
- Interactive Review Games (HTML5): These fun and motivating games encourage students to study and review chapter content.
- Student Toolkit (PDFs and an HTML5 calculator): Includes useful resources: graphic organizers and FoldNotes, Science Fair Guide for Students, Science Fair Guide for Parents, and the Writing a Lab Report resource, The Scientific Reasoning Skill Builder, downloadable full-color Periodic Table, and an Online Scientific Calculator and Graphing Calculator.
- Math-Focused Materials & Resources
- Smart Grapher (HTML5): A powerful, easy-to-use online graphing tool- students use their own data to create line graphs, circle graphs, and more.
- Sample Problem Sets I & II (Word, PDF): Editable skills worksheets that offer problem-solving strategies and meaningful application opportunities.
- The Solution Tutor (HTML5): This sharpens students' problem-solving skills through immediate feedback, helpful hints, and targeted remediation.
- Interactive Demonstrations (HTML5):. Given for every sample problem in the SE, these audio-enhanced multimedia features show problem-solving techniques in action and give extra practice.
- Web-Based Resources for Research & Extended Learning
- WebLinks (HTML5): The resources extend and enrich each chapter's content and support instruction.
- WebQuests (HTML5): 34 inquiry-oriented biology lessons relate directly to chapter content..
- BioZine (HTML5): BioZine is an engaging biology-focused website for students (<https://biologybiozine.com/>) that provides real-time newsfeeds from sites such as; BBC Science/Nature, CNN Science News, National Science Foundation.
- People and Careers in Science & Engineering (HTML5): Microsite delivers audio-enhanced leveled articles about real STEM professionals of the past and present and STEM-related professions.

Ancillary Materials - Teacher Components Describe each of the components, including a format description.

Teacher Materials for Labs

- Labs with Teacher Notes: This resource contains editable versions of the student labs along with focused instructional guidance and planning.
- Laboratory Manager's Professional Reference (PDF): This 150-page resource provides valuable guidelines and suggestions for managing student labs.
- Classroom Management Resources: The set of Classroom Management Resources provides useful teacher and student pieces that are instantly available and in one place.
- Animations, Simulations, & Videos
- Google Expeditions (VR/HTML and Javascript coding): The ready-made questions and corresponding activities guide students to think analytically and critically about what they have experienced and make connections to concepts presented in the HMH Florida Biology lessons.
- Teacher's Guides and Other Resources
- Interactive Reader Teacher's Guide (PDF, print)
- Florida Standards Guide Teacher's Guide (PDF, print)
- Engineering Design Guide Teacher Edition (PDF, print)
- Sample Problem Sets I & II Answer Keys (Word, PDF)
- Textbook Solutions (PDF)
- PDFs on the platform: The HMH Florida Biology program includes PDF versions of activities and worksheets.
- Teacher Presentation Tools
- Interactive Whiteboard Resources: These ready-made resources promote active participation and multisensory learning. The Interactive Whiteboard Resources are in SMART Notebook and ActivInspire Flipchart formats.
- PowerPresentations (PPT): These pre-built native PowerPoint files offer a valuable resource of engaging multimedia presentations that cover the core material of each chapter, saving valuable preparation time. Standardized Test Prep PowerPresentations are also included.
- Teaching Visuals (PDF): These digital versions of key illustrations and diagrams are ideal for whole-class instruction.
- Teaching Strategies Resources
- Teacher Toolkit (PDFs): The Teacher Toolkit has more than 200 lesson resources and tools to promote high-quality instruction and enhance student performance.
- Teaching Strategies (PDF): The online Teaching Strategies resource delivers chapter-specific guidance for Activating Prior Knowledge, Alternative Assessment, Demonstrations, Differentiated Instruction, Misconception Alerts, and Teaching Tips and Applications.
- Teacher Planning Tools
- mySmartPlanner (HTML5): The time-saving mySmartPlanner tool on HMH's online platform offers teachers a robust, intuitive, and flexible planning experience. Teachers can search for, choose, and schedule lessons and resources from one tool with just a few clicks. An incredibly convenient auto-schedule function allows the system to automatically populate the schedule for specific date ranges or for the entire year.
- Correlation to the Next Generation Sunshine State Standards (PDF): This resource shows the correlations between HMH Florida Biology content and the NGSSS.
- Online Assessment System
- ExamView Assessment Suite (HTML5): With ExamView Assessment Suite, teachers are able to access pre-made assessments, create their own assessments from the robust test bank, and make edits and customizations to any assessment. Assessments may be customized in a number of ways, such as reducing the number of test items, making linguistic accommodations, or recasting test items so that they are more strongly connected to students' experiences and familiarities. Teachers can run reports with a variety of filters for progress monitoring for classes and individuals. The ExamView Assessment Suite increases the ease of planning, administering, scoring, and reporting.
- Online Assessment with Remediation (HTML5): The HMH Florida Biology program includes Online Assessment with Remediation, which allows teachers to easily assign Section Quizzes and Chapter Tests. The system can automatically score responses, and performance data are recorded for the teacher. Automated remediation and reassessment are provided for Section Quizzes.
- Assessment Guide (PDF and print): The Assessment Guide includes Section Quizzes, Leveled Chapter Tests, Alternative Assessments, and more. It also includes answers and explanations of answers, scoring rubrics, a bubble answer sheet, and suggestions for assessing progress using performance, portfolio, and other forms of integrated assessment.

5. IDENTIFY WHICH INDUSTRY STANDARD PROTOCOLS ARE UTILIZED FOR INTEROPERABILITY?

HMH's educational technology supports the standards set forth by the IMS Global Learning Consortium.

6. HOW MUCH INSTRUCTIONAL TIME IS NEEDED FOR THE SUCCESSFUL IMPLEMENTATION OF THIS PROGRAM? Identify and explain the suggested instructional time for this submission. If a series, state the suggested time for each level. The goal is to determine whether the amount of content is suitable to the length of the course for which it is submitted.

This program is intended for use throughout one school year, in either a traditional daily schedule or a block schedule.

7. WHAT PROFESSIONAL DEVELOPMENT IS AVAILABLE? Describe the ongoing learning opportunities available to teachers and other education personnel that will be delivered through their schools and districts as well as the training/in-service available directly from the

publisher for successful implementation of the program. Also provide details of the type of training/in-service available and how it may be obtained. (The information provided here will be used in the instructional materials catalog in the case of adoption of the program.)

Supporting Initial Program Implementation To ensure teachers have the knowledge to begin implementing their new HMH program, professional learning is provided with purchase. We understand that schools and districts need choices regarding delivery options; as a result, we offer a variety of delivery methods for this initial program learning. Clients may choose from courses listed below. Getting Started with Florida Biology Participants engage in a variety of hands-on experiences to learn about Florida Biology organization, design, and resources, through direct instruction, guided practice, and cooperative exploration, participants will experience the program's resources both from a student and teacher perspective. The goal is to build deeper understanding and confidence to begin implementing Florida Biology in their respective learning environments. Learning Outcomes: • Enrich daily instruction by applying knowledge of Florida Biology program organization and pedagogy • Support differentiation, assessment, and effective whole and small group instruction using HMH program resources and instructional tools • Enhance instructional delivery and student learning using HMH technology Audience: Teachers, Coaches, Administrators Delivery: In-person Time: Full-day, Half-day or Webinar Getting Started with Florida Biology Train the Trainer As an alternative to Getting Started, leaders and educators can choose to build capacity internally. Our specialized team of consultants helps school and district trainers deliver initial program training at their respective sites. Learning Outcomes: • Enrich daily instruction by applying knowledge of Florida Biology program organization and pedagogy • Support differentiation, assessment, and effective whole and small group instruction using HMH program resources and instructional tools • Enhance instructional delivery and student learning using HMH technology Audience: Teachers, Coaches, Administrators Delivery: In-person Time: Full-day Getting Started Leadership Webinar Designed specifically for district and school leaders and instructional coaches, the Getting Started Leadership Webinar provides an overview of the Florida Biology program organization, lesson design, and support resources. The goal is to build deeper understanding of the program's alignment to standards as well as identify key teacher and student behaviors to observe in their learning environments. Learning Outcomes • Recognize program alignment to national standards • Understand program organization and resources that support differentiation, assessment, and effective whole and small group instruction • Identify teacher and student behaviors that positively impact student achievement when observing Florida Biology classroom implementation and delivery Audience: Teachers, Coaches, Administrators Delivery: Webinar Time: 1 hour

8. WHAT HARDWARE/EQUIPMENT IS REQUIRED? Briefly list and describe the hardware/equipment needed to implement the submission in the classroom. REMEMBER: Florida law does not allow hardware/equipment to be included on the bid! However, schools and districts must be made aware of the hardware/equipment needed to fully implement this program.

Districts that choose to use the program's technology-based textbooks and components can use any of the following hardware/equipment: Operating systems: Chromebooks Windows 7, 8.1 desktop/touch tablet, 10 Mac 10.9, 10.10, 10.11 iOS 8 and 9.7"+ screen Android 4.4 and 5.7"+ screen Minimum RAM: 512 MB Hard drive space needed: Core program: less than 1 GB ExamView Assessment Suite: 32 MB on PC, 28 MB on Mac

9. WHAT LICENSING POLICIES AND/OR AGREEMENTS APPLY? If software is being submitted, please attach a copy of the company's licensing policies and/or agreements.

See Attached

10. WHAT STATES HAVE ADOPTED THE SUBMISSION? List some of the states in which this submission is currently adopted.

This program is brand new and has not been adopted in other states as of this time.

11. WHAT OPEN EDUCATIONAL RESOURCES RELATED TO THIS BID DO YOU MAKE AVAILABLE(S)? List and describe each of the components, including a format description. (Open Educational Resources (OER) are high-quality, openly licensed, online educational materials that offer an extraordinary opportunity for people everywhere to share, use, and reuse knowledge.)

Open Educational Resources are not included in the HMH Florida Biology program.

12. ALTHOUGH NOT CALLED FOR IN THE STATE ADOPTION, DO YOU HAVE ADVANCED PLACEMENT (AP) OR ACCELERATED PROGRAM INSTRUCTIONAL MATERIALS AVAILABLE FOR THE COURSE(S) BID FOR ADOPTION?

HMH Florida Biology includes support and materials for advanced learners, such as Differentiated Instruction: Pre-AP strategies and Pre-AP Activities. The program also includes other challenging extension and enrichment activities.

13. WHAT, IF ANY, FOREIGN LANGUAGE TRANSLATIONS DO YOU HAVE AVAILABLE?

The HMH Florida Biology program is available in Spanish. The English-language program includes a multi-language glossary (with audio) that presents key terms and definitions in English and Spanish.