

LabTutor® Teaching Suite

Better learning. Remarkable savings.



LabTutor allows pre-lab preparation, post-lab analysis, reporting and submission from anywhere, using the Internet and any popular browser.

LabTutor is an integrated software solution for life science education that provides outstanding time and cost savings to deliver better learning outcomes for students. LabTutor engages students by efficiently guiding them through their course content with real data acquisition, analysis, graphing and student reports. When class ends, student content is synced to LabTutor Online so that students can have access to their experiments, data, reports and videos 24/7 using LabTutor Online.

Student-centred learning

LabTutor offers students over 100 self-contained experiments featuring over 500 exercises and real data acquisition using PowerLab systems. LabTutor guides students through experiment protocols and analysis, and tests their understanding of the scientific principles behind each experiment. The interactive nature, easy structure and comprehensive content captures students' interest and maintains their attention to enhance the learning process.

Increased lab productivity and savings

LabTutor makes laboratory classrooms more efficient. Laboratory preparation, set up time and supervision requirements are minimized, and there is no need for printed manuals. Additionally, the major advantage of LabTutor Online is that students can do pre-lab preparation, post-lab reporting and revision outside of the laboratory. This frees up the laboratory classroom so your institution can use the same systems with more students across more courses.

Single-point course and content administration

LabTutor Server allows easy management of any number of courses and students from a central networked computer. You can import student lists, assign any combination of experiments to a specific list or course, and update any experiments on computers in multiple lab locations with a single action.

- Ready-to-use experiments with real-time data acquisition and an easy-to-use interface
- Enhance understanding of physiology and how it relates to postgraduate employment
- Use patient videos and clinical tests to introduce concepts such as illness, treatment and procedure
- Customization of experiment content with the supplied LabAuthor application

“The integrated Powerlab teaching materials continue the tradition of dependable hardware and intuitive software. [ADInstruments employees] introduce me to innovations that allow me to improve the education of my students. What’s most impressive is how the PowerLab people work with me to help me create the educational experiences that I want my students to have. Everyone is just so helpful - I can call whenever I have a question and will immediately get an informed and relevant response. It’s rare to find a company so focused on helping me do what I want to do.”

Tom Pisarri, Ph.D.
 Assistant Professor, School
 of Medicine, Creighton
 University

LabTutor Client interface and typical experiment

Students record and analyze their data with interactive self-contained experiments featuring experiment background, step-by-step protocols, real data acquisition, graphing, data analysis, and reporting. The consistent, step-by-step structure of every LabTutor experiment enables student groups to work through complete laboratory sessions with minimal supervision and no demonstrations. This results in better learning and better laboratory efficiencies.

Introduction



A typical LabTutor experiment

Introduction & background information

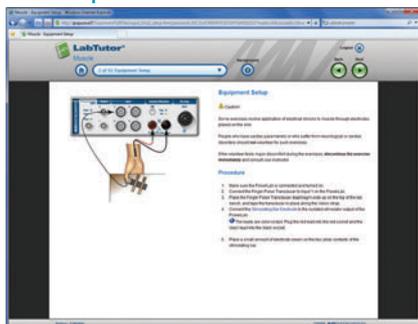
Exercises begin by introducing the biological concepts to be investigated and clearly defines the exercise's learning objectives relating to both scientific knowledge and postgraduate employment.

The Background details physiology, anatomy and pathophysiology relevant to the exercise. All pages in a LabTutor exercise link to this page for easy referral.

Set up

Students are provided easy to follow instructions and diagrams, so they can focus on scientific concepts rather than optimizing equipment and experimental conditions.

Set up



Data acquisition with hands-on exercises & training

Students use different equipment and techniques to take relevant measurements from themselves and classmates such as breathing rate, respiratory flow, blood pressure and peripheral nerve function. Data recording pages include preset acquisition parameters, clear instructions and links to additional information.

Data acquisition



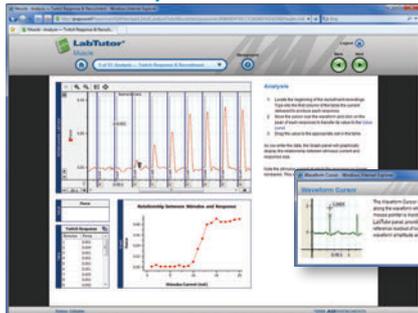
Data analysis & graphing

Students look at the physiological data acquired using the PowerLab to construct graphs, analysis tables and answer relevant questions with hyperlinked help items available to assist in the analysis.

Report submission

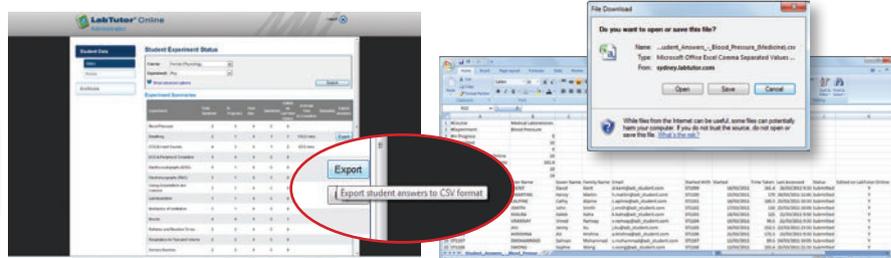
Student data, analysis tables and graphs are automatically transferred to the Report section, where students answer questions based on their data and observations. When students have completed a report, they can review their answers before submitting them for assessment. Once submitted, report items can not be changed but all other sections, including videos and background information, are available to the student for revision until archived by the administrator.

Data analysis



Student assessment and marking

Educators and instructors can login to LabTutor Server via LabTutor Online and download student reports as PDF or CSV files for assessment and grading.



Configured LabTutor Experiments

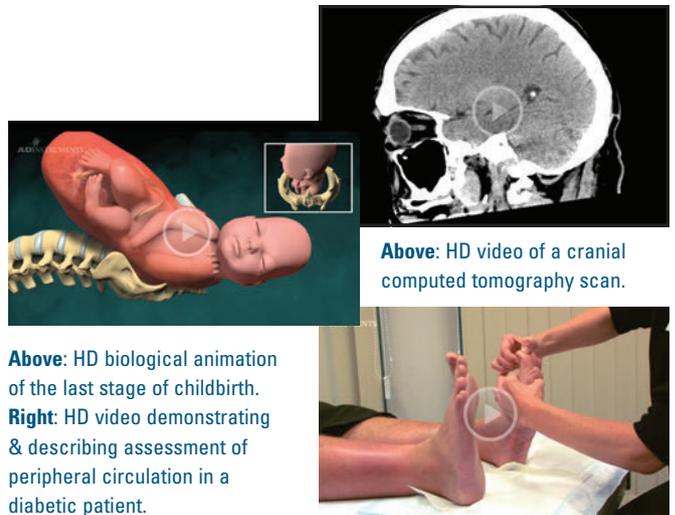
The LabTutor experiment collections feature over 100 English language experiments with more than 500 individual exercises. The collections include Human Physiology, Animal Physiology, Exercise Physiology, Biology, Medical Laboratories, Pharmacology, Psychophysiology & Applied Nursing. Popular LabTutor experiments are also available in French, Spanish, Italian, German, Portuguese, Japanese, Korean, Simplified Chinese, Traditional Chinese, Polish and Russian.

LabTutor users have free access to the ever-growing collection of experiments and exercises which can be downloaded from our website at www.adinstruments.com/downloads

Specialist nursing & medical case study modules

The Medical Laboratories and Applied Nursing Experiment collections are ideal for undergraduate medical and allied health classes, as they present real patient case studies to demonstrate the connection between scientific theory and clinical practice.

The case studies include HD video interviews with real patients, real patient data (acquired with PowerLab) and clinical/specialist test results, as well as diagnoses and advice presented by medical and allied health professionals.



LabAuthor

Create or customize

LabAuthor provides easy-to-use software tools for creating and editing LabTutor experiments. You can make changes to any preconfigured LabTutor experiment, or create a new experiment to suit your students' abilities, your laboratory classroom's facilities and your curriculum's learning outcomes.

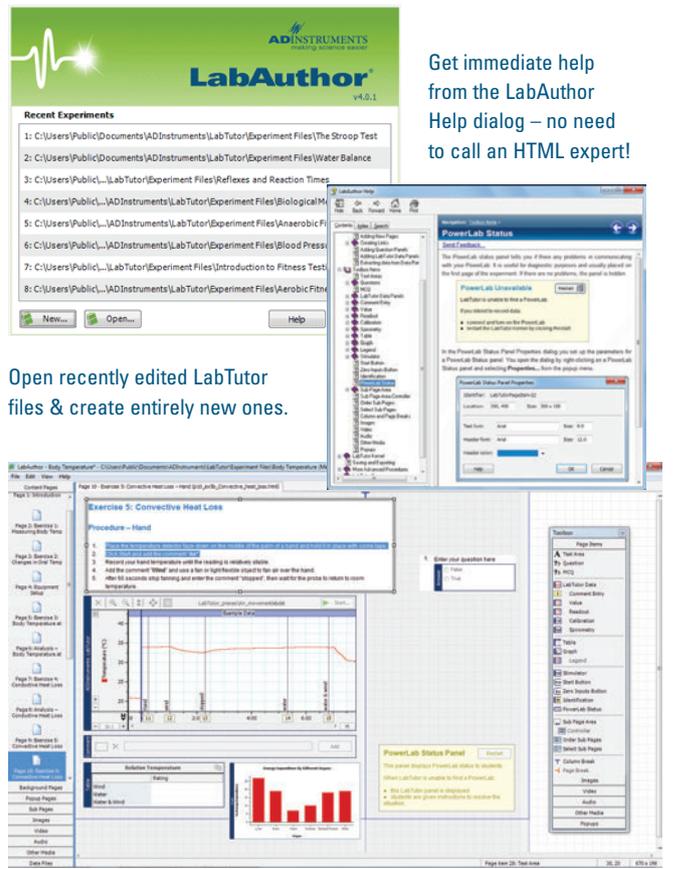
Educators also have the option to provide example data for students to analyze. This is ideal for distance education where students may not be able to attend the laboratory for data acquisition.

No programming required

LabAuthor supports HD video and audio files, multiple choice questions, pop-up windows, interactive lists and much more. It has an easy-to-use interface with object drag-and-drop functionality enables fast editing and creation of experiments. Best of all, LabAuthor can be used without any programming or HTML skills.

Set essential tasks

Educators can now create learning modules to ensure students do not skip or miss sections of work. This is done by setting tasks that must be completed before students can proceed in the experiment. Tasks can include multiple choice quizzes, data acquisition, analysis or reporting.



Intuitive & easy-to-use 'what-you-see-is-what-you-get' (WYSIWYG) interface. Just drag & drop!

LabTutor Server

LabTutor Server, the centralized administrative interface for the LabTutor Suite, allows you to easily manage multiple courses, instructors and student information. From the dedicated server PC, you can easily download, install and update experiments from the ADInstruments Software Database, or experiments customized using LabAuthor. No more running from computer to computer to update experiments.

Similarly, all student experiment data is stored on LabTutor Server. Students are able to complete their recording sessions from any client computer and from within any group.

Control student access

Using LabTutor Server, administrators can apply course restrictions to streamline management and protect learning resources. When restrictions are applied, students can only access their LabTutor course using a specific code. For institutions utilizing LabTutor Online, administrators can choose to give access to supplementary resources such as LabTutor TV.

Share administrative teaching tasks

Administrators can also assign instructors to specific courses using LabTutor Server. Instructors can log in to LabTutor Server and only see the student data that is relevant to their role. The instructors role is limited to tasks related to teaching a course such as managing student accounts, configuring course access codes, monitoring student progress, adding and deleting student data and reviewing reports for assessment. Along with these tasks, administrators are able to manage the overall course as well as IT requirements of LabTutor Server such as setting the data base backup time.

The screenshot displays the LabTutor Server Administration interface. At the top left is the LabTutor Server Administration logo. On the right, there are links for Help and Logout. The main content area is divided into a left-hand navigation menu and a central status panel. The navigation menu includes buttons for Server (with sub-options: Status, Configuration, LabTutor Online, Accounts and Licensing, Administrators), Experiments, Courses, Students, Student Data, and Archives. The status panel, titled 'Status', contains the following information:

- LabTutor Server Software:** Installed version: 4.4; Latest version: 4.4.1 (released Jan 23, 2012). An 'Update...' button is present next to the latest version.
- Software License:** LabTutor Server license: SH45-WESL-JKxx-xx (expires Jan 1, 2013); Licensed user name: Jeremy Fowler; Licensed organization: For distributor use only.
- Student Licensing:** Licensing mode: PowerLabs Required.
- Background Tasks:** Queued submission emails: 0; Queued student requested emails: 0; Queued for archiving: 0.

The footer of the interface shows '© 2012 ADINSTRUMENTS' and 'Internet | Protected Mode: On'.

Experiments

Download new & updated experiments from our website, or upload experiments customized or created with LabAuthor.

Courses

Select experiments for each course, assign instructors, import student lists, & control how students access & submit laboratory reports.

Students & Student Data

Import student lists, manage student access, track student progress through experiments & reports.

Archives

Save & store student material from previous assessment periods & download archived material as PDFs.

Reduce class time with LabTutor Online

Access LabTutor Online with any web connected device

With additional licensing to LabTutor Online, students can access their data and analysis, view additional educational material such as videos, and complete and submit their reports from anywhere, anytime and from almost any device that is connected to the internet.

LabTutor Online is a secure “cloud” service which uploads all student data recorded in the Laboratory to dedicated servers hosted by ADInstruments. LabTutor Online looks and operates almost identically to the LabTutor Client in the laboratory and offers convenience of out of lab access for both students and administrators.

Using LabTutor Online, educators can track and monitor student progress through reports, and revise and download student reports in PDF or spreadsheet format for assessment purposes all from the comfort of the office or home computer.

LabTutor TV

Educators with students using LabTutor Online can also choose to provide access to LabTutor TV: a collection of scientific and medical programs that promote supplementary learning and reinforce the social and cultural aspects of science education.



LabTutor TV can be streamed to any device with minimal delay.

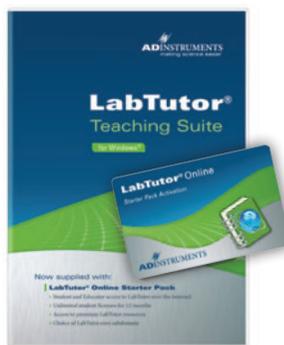
Getting LabTutor Online

LabTutor Online Starter Pack

All new orders and upgrades to LabTutor 4 Teaching Suite include the complimentary LabTutor Online Starter Pack, which provides free 12 months access to LabTutor Online for an unlimited number of students. The Starter Pack is the easiest way to see if implementing the cloud technology will improve your classroom workflow - all at no extra cost.

LabTutor Student Access Cards

For institutions utilizing the LabTutor Online service, educators can choose to provide students with individual LabTutor license cards to set up their own account. LabTutor Student Access Cards are available in 6 or 12 month periods and the license card number must be entered at the start of the course.



How to get LabTutor 4 Teaching Suite

Complete PowerLab Teaching Systems

Every PowerLab Teaching System is supplied with the software, hardware, transducers and accessories for a wide range of experiments. The ability to add components to a system provides flexibility, and safeguards your investment. In addition, the complete PowerLab Teaching System solutions offer outstanding value for money.

The powerful and easy-to-use systems allow students to record and analyze data in a wide range of life science experiments including physiology, sports science, biology, psychophysiology and pharmacology. This makes them the preferred system for any classroom setting – from introductory through to advanced curricula.



LabTutor Teaching Systems with PowerLab 15T

PTB4151 Human Physiology System I

PTB4152 Human Physiology System II

PTB4153 Human and Animal Physiology System

PTB4154 Animal Physiology System

LabChart Teaching Systems with PowerLab 4/26 or 26T

PTB4262 Intermediate Teaching System

PTB4263 Advanced Teaching System

PTB4264 Ultimate Teaching System

PTB4265 Psychophysiology Teaching System

PTB266 Neurobiology Teaching System



Get a FREE upgrade to LabTutor 4

If you're using LabTutor 3 or an earlier, you can upgrade to LabTutor 4 Teaching Suite free of charge. Our representatives and technicians will enable a seamless software update and provide you with a LabTutor Online Starter Pack (12 month free LabTutor Online access).

Still unsure?

We can visit you for an obligation free demonstration. Call your local office to discuss your needs and budget with one of our experienced representatives.

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PowerLab systems and signal conditioners meet the European EMC directive. ADInstruments signal conditioners for human use are approved to the IEC60601-1 patient safety standard and meet the CSA C22.2 No. 601.1-M90 and UL Std No. 2601-1 safety of medical electrical equipment standards.



ADINSTRUMENTS.com

ISO 9001:2008 Certified Quality Management System



Australia

Tel: +61 2 8818 3400
info.au@adstruments.com

Brazil

Tel: +55 11 3266 2393
info.br@adstruments.com

Germany

Tel: +49 6226 970105
info.de@adstruments.com

India

Tel: +91 11 4156 1202
info.in@adstruments.com

Japan

Tel: +81 52 932 6462
info.jp@adstruments.com

New Zealand

Tel: +64 3 477 4646
info.nz@adstruments.com

North America

Tel: +1 888 965 6040
info.na@adstruments.com

North Asia

Tel: +86 21 6093 7558
info.cn@adstruments.com

Pakistan

Tel: +92 21 3489 2518
info.in@adstruments.com

South East Asia

Tel: +60 3 8024 5296
info.sea@adstruments.com

South America

Tel: +56 2 2716 7402
info.cl@adstruments.com

United Kingdom

Tel: +44 1865 332 050
info.uk@adstruments.com

International

Tel: +61 2 8818 3400
info.au@adstruments.com