• The Financial Trading System (FTS) is a state-of-the art suite of educational software tools and teaching material for high school and university courses in finance, accounting, and economics.

• **FTS includes a virtual portfolio management system as well as an interactive trading simulation with price discovery, letting students experience both real-world financial markets and also the dynamics of a dealing room.**

• FTS provides the most complete solution available today for financial education. No other systems provide any analytical tools or algorithmic trading tools that are critical in today’s financial markets. No one provides both a position management simulation and a simulation with price discovery. No one provides modules that let students dig deeper and develop their practical and analytical skills.

• **Three questions to ask:**
  - Do you want a trading simulation with price discovery as well as a virtual portfolio system and supporting analytical modules for one low price?
  - Do you want students to learn how analytics and quantitative techniques are applied in portfolio management?
  - Do you want students to build their conceptual, modeling, and analytical skills?

• The central difference between FTS and other systems is our focus on practical, analytical, and modeling skills. For example, both our simulations allow students to develop algorithmic trading strategies using VBA which are then monitored and executed in real time. No other educational simulation has this capability.

• Our academic support is provided by professors who have taught with the system at top business schools, is used by schools that have trading rooms and by many schools that do not, and is deployed in over 20 countries.
An FTS subscription can be customized to meet your teaching needs. There is no restriction on access: students can access the system from home, which allows for widespread use in online courses and distance education.

A quick guide of the capabilities of FTS and what your students will achieve is in the following documents:

- The **Student Case Preparation Guide** shows you exactly how students learn and develop their analytic and model building skills using the **FTS Interactive Markets** Trading Simulations. Advanced uses include building automated trading strategies in Excel using VBA.

- The **Hedging with Futures** project is one example of how the real time projects let students develop a deep understanding of financial concepts and their practical application in portfolio management in our **FTS Real Time** virtual portfolio simulation. Other examples of projects include the
  - **Black-Litterman Model**
  - **Hedging with Options**
  - **International Diversification**
  - **Earnings Forecasts and PEAD**
  - The **Value Investing Project**
  - The **Accruals Anomaly**

The next graphic summarizes the different FTS products and applications; they are described in more detail below. We can customize a package to meet your teaching needs, please contact us at **ftsweb@gmail.com**.
The FTS system comprises the following, described briefly below (you can get more details on each at www.ftsweb.com):

| Virtual portfolio management: **FTS Real Time System** | Students manage positions of real-world securities at real-time prices. We run the entire back office (including handling the real-time data feeds). With the built in analytical support and algorithmic trading capability, it provides a uniquely successful way to bridge theory and practice. | We provide complete back office support, including real time data feeds, a step-by-step teaching guide, access to company filings and publicly available information, built-in analytical support. Examples of how students learn is our Value Investing Project and the Hedging with Futures project. |
| Markets with price discovery: **FTS Interactive Markets** | These are true “markets” where students trade with each other. Students experience what it is like to be in a live dealing room. Specially designed trading cases tie a central function of markets, price discovery, to concepts commonly taught. A variety of microstructure treatments provide a rich framework for understanding liquidity, transparency, market impact, and the dynamic nature | We provide over 30 trading cases and ongoing support for creating customized trading cases. The cases can be used in courses in finance, accounting, economics, and we now have cases covering ethics. This system is also used for experimental research. Students develop their analytical skills and modeling skills in Excel as they prepare for cases, as you can see in the Student |

**FTS Real Time System:**
- Virtual Portfolio Management, compete with projects and exercises
- FTS Interactive Markets: Create a dealing room where students trade with each other
- FTS Experimental Research System: conduct experiments that are easy to design and test
- FTS Modules:
  - Financial Statement Analysis
  - Options and Futures Modules
  - Efficient Portfolio Module
- FTS Display System: create customized display for large screen TV's

**FTS System**
| The Financial Statement Analysis Module | A hands-on way to teach and learn financial statement analysis from first principles. The module includes quick and easy access to a rich set of company filings, from US and international companies. Students can conduct a comprehensive fundamental analysis and gain a deep understanding of financial performance in light of a company’s business strategy. | Complete with student and instructor handbooks and a grading capability that lets you quickly see if students have mastered concepts. The self-study data set is especially useful for distance learning and online students. This module has been enhanced to work directly with databases such as Compustat and Morningstar, allowing students to gain a deep appreciation for corporate financial reporting, financial statement analysis, and valuation. |
| Valuation Tutor | An interactive and visual presentation of Financial Statement Analysis and Valuation, with a complete textbook, lessons, and case studies | Based on learning via exploration and discovery, Valuation Tutor includes access to interactive SEC filings of the 3000 largest US companies, and lets students analyze and compare companies easily. |
| Bond Tutor | Covers bond valuation, the term structure of interest rates, interest rate futures, and hedging interest rate risk. | Our unique “interactive textbook,” where visual calculators are integrated into the online textbook. You can change the numbers and see what happens. |
| The Modules | The FTS Modules are “stand alone” teaching tools that allow students to analyze real world problems with real world data. The modules perform calculations that are difficult by hand or in a spreadsheet, and also visually illustrate how techniques and concepts are applied in practice. | The modules are described here. They are stand-alone teaching tools that provide a graphical exposition of concepts, covering portfolio theory, bonds, options, and futures. These are complemented by our online texts on portfolio theory and option valuation. |
| Experimental Research | The FTS Interactive markets have long been used for experimental research. Contact us for more information. | Experimental research is conducted with the FTS Interactive Markets as well as our general experimental system that allows wide range of experiments to be conducted. |
| FTS Instructional Support | We provide training on how to use the system effectively in the classroom in any finance or related course. | Our system was designed by Professors John O’Brien and Sanjay Srivastava, and they continue to be deeply involved in sharing their teaching and research experiences over the past twenty years. |
| FTS Technical Support | We provide technical support all the time; since we operate in over 20 countries, we are well aware of time zones! | Over the years we have seen a large growth in the use of our system in online courses, so we are fully aware of issues with online courses and distance |
The FTS Display System lets you create displays for computers connected to large, high definition display monitors (or televisions). Every part of the display is customizable.

The application consolidates news and information from different internet sources market data charts from FTS data servers to provide a rich display of news, financial news, sports, and entertainment.

FTS was recognized in 1996 when the Smithsonian Institution's Museum of American History made the progressive work of the FAST Lab part of its permanent research collection.

For those who have built or are building trading rooms, it is critically important to develop a strategy for integrating the trading rooms into the curriculum. The investment in such rooms is typically large, and while a trading room can be a showpiece and demonstrate a commitment to technology and real-world education, the effective use of such rooms can be limited by several factors. The foremost is faculty training and a willingness to adapt newer methods into their classes. Another is technical support that makes widespread usage feasible. The investment is hard to justify if either a very small number of students benefits from it or if it becomes resource that just “sits there” and is essentially a computer lab with flashy displays.

FTS has a broad range of applications, and is used to teach courses in finance, accounting, and economics. Our goal is to link what is taught in standard courses, taken by most students, to real world markets so that all the students see and experience how the concepts they learn are applied and used in the real world. While you can use the system to run specialized courses on trading or market microstructure, our focus and the applicability of the system is much broader.

As a result, FTS is used by schools that have built trading rooms and by schools that have not. It is used for in-class trading exercises as well as by online and distance learning students. Our software was developed by professors for teaching and we place a large emphasis on faculty training. This training is done by professors who have used the system, not by system developers or programmers. Such training typically takes place over several sessions, and includes feedback on course outlines and syllabi (partly to make sure that what is required of students is feasible). With this approach, labor intensive though it is, we have successfully helped many schools with curriculum integration.

Examples of how FTS can be used in your courses are in this document. If you have any questions, or would like a web meeting for a demonstration of the system, please do not hesitate to contact us at ftsweb@gmail.com

Finally, we would also like to mention (independent) published articles that study the effectiveness of the FTS Interactive Markets:

1 For a discussion of some of the issues surrounding trading rooms, see the BizEd article available at http://www.aacsb.edu/publications/archives/jan03/p22-27.pdf
“Market Games In Finance Education,” by F. Douglas Foster, Shirley Gregor, Richard Heaney, Terry O’Neill, Alex Richardson, Robert Wood

“Impact Of Computer Based Share Market Simulations On Learning: A Link Between Self-Efficacy And Understanding” by F. Douglas Foster, Shirley Gregor, Richard Heaney, William Northcott, Terry O’Neill, Alex Richardson, Emma Welch, Robert Wood

“Using Trading Simulations to Teach Market MicrostructureConcepts,” by Asli Ascioglu, Bryant College Lynn Phillips Kugele