FBE 405: Behavioral Finance  
Fall 2022  
Monday Wednesday, 2:00–3:50 PM JFF 417, 4 Units

Instructor: Hirshleifer  
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Email: hirshlei@marshall.usc.edu  
Office Hours: 4:15-5:15 PM and by appointment  
Teaching Assistant:  
Spencer (Siyu) Zhu  
Siyu.zhu.2022@marshall.usc.edu

Course Description  
Behavioral finance studies how the psychological biases of investors and managers affect financial decisions and markets. This course covers scientific evidence about what causes misvaluation, how investors can exploit market inefficiency in their trading decisions, how managers can address market mispricing in corporate financing and investment decisions, and how managers can correct for their own biases. To prepare students for practical financial decision making, the course has a quantitative component that includes factor models, portfolio theory, risk-adjusted discounting, and statistical data analysis, including regression methods. The course primarily involves lecture, discussion, in-class exercises, and student presentation, which will be applied to real-world examples and evidence.

Learning Objectives  
Through lecture, readings, and assignments, students will be able to:  
1. Understand some key principles of psychology relevant for financial markets.  
2. Understand some key aspects of how psychological processes affect the decisions of individual and institutional investors and other market participants.  
3. Understand some key aspects of how psychological processes affect equilibrium prices and other market outcomes in financial markets.  
4. Understand some key aspects of how psychological processes affect firm and managerial behavior.  
5. Be able to apply these concepts to applied financial problems, including appropriate data analysis in support of well-considered decisions.

Required Materials  
Required readings are listed in the class schedule at the end of this syllabus. I will post a version of the lecture slides on Blackboard the night before each class. The slides provide a detailed outline of the lecture, but not an exhaustive summary of it.
Readings are usually downloadable from the web, and may also occasionally be made available on Blackboard. If you have any questions or need assistance with the Blackboard Course Pages, please contact the Marshall HelpDesk at 213-740-3000 (option 2) or HelpDesk@marshall.usc.edu. Alternatively, (213) 740-5555 will get you the USC ITS Help Desk.

**Catch-up and Optional Additional Background Material**

If you want further background in the finance field, useful references include Bodie, Kane, and Marcus, Investments, Grinblatt and Titman, *Financial Markets and Corporate Strategy* (corporate finance and investments), Brealey and Myers, *Principles of Corporate Finance* (corporate emphasis), and Welch, *Corporate Finance: An Introduction* (available free online!)

http://book.ivo-welch.info/

**Prerequisites and/or Recommended Preparation:**

Prerequisites: BUAD 215 or BUAD 306 or BUAD 308. Requirements are familiarity with stocks, bonds, portfolio theory, CAPM, basic discounting and project evaluation, the efficient markets hypothesis, and basic economics. Algebra, probability theory and statistics. For example, the concepts of probability distribution, conditional probability, expected value, and covariance. Ability to perform statistical calculations using software such as Excel to analyze data, including univariate and multivariate regression. A regular standard-feature calculator is required for the course; a financial calculator is not required.

**Course Notifications:**

Class notifications and information will be posted on Blackboard.

**Grading Policies:**

Consistent with Marshall grading policies, grades for the class are expected to average around 3.5.

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>% of Overall Grade</th>
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</thead>
<tbody>
<tr>
<td>Team Debate Projects (2)</td>
<td>24</td>
<td>24%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25</td>
<td>25%</td>
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<tr>
<td>Trading Strategy Project</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35</td>
<td>35%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
<td><strong>100%</strong></td>
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**CLASS PARTICIPATION**

Your active participation is vital to your learning the material, your learning how to communicate as a professional, and for the success of the class. Your being prepared provides a benefit to your classmates, so please be ready to contribute to discussions. But please do not feel that you need to wait to speak up until you have an exceptional comment. Even straightforward questions and tentative ideas advance the class discussion. For those who find speaking up uncomfortable, I encourage you to take this opportunity to practice. It pays off!
During class sessions, I often assume the role of a facilitator to encourage a useful discussion. The direction and quality of a discussion is the collective responsibility of the class.

ASSIGNMENTS
Assignments must be turned in on the due date/time electronically via Blackboard. If the assignment is a team assignment, only one assignment is turned in for the whole team. Completed assignments should use word processing and/or spreadsheet software (e.g., Microsoft Word and Excel).

Any assignment or assignment component turned in late, even if by only a few minutes, will receive a grade deduction (for example, if your work is a B+ grade, you will be given a C+ grade). If your internet breaks down on the due date, you must deliver a hard copy at the beginning of class on that day. If you are unable to attend class on that day, please arrange for it to be delivered to the classroom or to my box by the start of class. Late or not, however, you must complete all required assignments to pass this course.

Evaluation of Your Work:
I will do my best to evaluate assignments fairly and objectively. If you feel that an error has occurred in grading of any assignment, you may, within one week of the date that the assignment is returned to you, send me a memo electronically (no handwriting please) requesting a regrade. Attach the original assignment to the memo and explain clearly and carefully why the assignment should be regraded. Reevaluation can result in a positive or negative grade adjustment.

TEAM PROJECTS
Students will be assigned to teams. If you want to change teams (perhaps for scheduling reasons), please contact the Teaching Assistant.

Team Debate Projects:
There will be debates about issues in applied behavioral finance. Each team will be assigned to a pro or con side of the debate. The team will prepare a two-page (double-spaced) Executive Summary and PowerPoint slides of the argument in favor of their side. The team will present their argument, hear the presentation of the opposing side, and will have the chance to give a rebuttal to the arguments of the other side. Time permitting, each side will also be able to pose questions to the other side and to reply to audience questions.

Note: For most issues, the pro and con sides of the debate are not equally easy to make. Grades are based on the quality of the work, which can be equally good on both sides of the case.

Graded Components:
Executive Summary, PowerPoint Slides and Presentation (arguments, clarity)
Responses to the Audience and Opposing Side (arguments, clarity, civility)

Trading Strategy Project
Each team will use stock market and accounting data to develop their own trading strategies. The team will perform statistical analysis to evaluate the performance of their strategy using the
methods covered in class. The team will prepare a two-page (double-spaced) Executive Summary of their approach and the strengths and weaknesses of their strategy, as well as PowerPoint slides, and teams will present their trading strategies to the class.

Note: The grade is based on the quality of the work, which is not measured solely by a single statistical measure such as the “alpha” of the strategy.

Graded Components:
Executive Summary, PowerPoint Slides and Presentation (creativity, quality of economic and statistical analysis, clarity)

EXAMS

Exams will be in class, closed books/closed notes. Calculations will be required. More information will be provided prior to the exam.
# COURSE CALENDAR

* = Optional Reading

<table>
<thead>
<tr>
<th>Week 1 8/22, 8/24</th>
<th>Topics/Daily Activities</th>
<th>Readings and Assignments</th>
<th>Deliverables with Due Dates</th>
</tr>
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</table>
| Week 2 8/29, 8/31 | 2a: Portfolio Theory, the CAPM, and Performance Measurement  
2b: Factors and Factor Models | Continue to review previous courses materials or textbooks on statistics, investments. |
|------------------|-----------------------------------------------|------------------------------------------------------------------|
| Week 3 9/5, 9/7 | 3a: LABOR DAY HOLIDAY  
| Week 4 Dates 9/12, 9/14 | 4a: The 3-Factor Model and Limits to Arbitrage; | “Common risk factors in the returns on stocks and bonds,” Fama, E. and K.  
Due 9/12: Executive Summary for Opportunism Debate |
4b: Limits to Arbitrage II

French, 1993, *Journal of Financial Economics* 33, 3-56. [Read pp. 3-16 (skip Subsection 2.1.1), 19-22, 24-26, 31-8, 40-41 (skip Subsection 5.2), 53-55. Ignore RMO and bonds (TERM and DEF). You need to understand the tables and their variables, but not all the statistical analysis.]

“How the really smart money invests,” *Fortune* July 6, 1998. [But only skim the “human interest” material]

Week 5 9/19, 9/21

5a: CLASS DEBATE: Opportunism by Firms and Advisors, and Investor Irrationality

5b: How Do Investors and Managers Think? Heuristics, Biases, and Behavior I


Week 6 9/26, 9/28

6a: How Do Investors and Managers Think?

<table>
<thead>
<tr>
<th>Week 7</th>
<th>7a: MIDTERM EXAM</th>
<th>7b: Limited Attention I: Heuristic Simplification</th>
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<tr>
<td>10/3, 10/5</td>
<td>Readings not required until after midterm:</td>
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<p>| 6b: Midterm Review | Kent Daniel, David Hirshleifer and Siew Hong Teoh, Journal of Monetary Economics 49(1), (2002):139-209. [Read Section 2.1, pp. 144-147] |
|-------------------| “Overconfident Investors, Predictable Returns, and Excessive Trading,” Kent Daniel and David Hirshleifer, (2015), Journal of Economic Perspectives, 29(4):61-88. [Read pp. 63 (last paragraph) through 68 (just the top)] |</p>
<table>
<thead>
<tr>
<th>Week 8</th>
<th>10/10, 10/12</th>
<th><strong>8a:</strong> Trading Strategy Project Orientation&lt;br&gt;<strong>8b:</strong> Limited Attention II: Blatant Errors</th>
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<tbody>
<tr>
<td>Week 9</td>
<td>10/17, 10/19</td>
<td><strong>9a:</strong> Overconfidence and Aggressive Trading&lt;br&gt;<strong>9b:</strong> Underreaction and Overreaction</td>
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<td><strong>Due 10/17:</strong> Executive Summary for Mispricing and Bubbles Debate</td>
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<tr>
<td>Week 10</td>
<td>10/24, 10/26</td>
<td>10a: Mood and Feelings; 10a: Behavioral Corporate Finance I</td>
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| Week 11  | 10/31, 11/2 | 11a: CLASS DEBATE: Mispricing and Bubbles  


| Week 13  | 11/14, 11/16 | 13a: Financial Market Bubbles I  
Due 11/16: Executive Summary for Trading Strategy Project |


“Introduction to Bitcoin,” Jie Gao, Bentley University, 2022.

* “Making Sense of Tesla’s Run-up,” Bradford Cornell, Advisor Perspectives, 7/19/21

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<th>Week 14</th>
<th>11/21, 11/23</th>
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<tr>
<td>14a: Catchup and Course Sum-up</td>
<td>14b: THANKSGIVING HOLIDAY</td>
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<tr>
<th>Week 15</th>
<th>11/28, 11/30</th>
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<tbody>
<tr>
<td>15a: Trading Strategy Project Presentations</td>
<td>15b: Final Exam Review</td>
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<tr>
<th>FINAL EXAM</th>
<th>12/9</th>
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<tr>
<td>FINAL EXAM: Friday, December 9, 2:00 PM – 4:00 PM</td>
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ADDITIONAL INFORMATION

Technology Policy
Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audi-
otaping may be permitted if approved by the professor. Use of any recorded or distributed mate-
rial is reserved exclusively for the USC students registered in this class. Exceptions to this policy
may be granted to individual students with appropriate documentation on a case-by-case basis.

Open Expression and Respect for All
An important goal of the educational experience at USC Marshall is to be exposed to and discuss
diverse, thought-provoking, and sometimes controversial ideas that challenge one’s beliefs. In
this course we will support the values articulated in the USC Marshall “Open Expression State-
ment.”

USC Statement on Academic Conduct and Support Systems

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a seri-
ous academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in
SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other
forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university poli-
cies on Research and Scholarship Misconduct.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student
Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who
encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appoint-
ment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a
Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each
course instructor by the student and followed up with a discussion. This should be done as early in the semester as
possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact
OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
sites.google.com/usc.edu/counseling-mental-health
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling,
stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call
988lifeline.org
The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and
confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week,
across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining
custom local care and resources with national standards and best practices. The new, shorter phone number
makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-
8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.
Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL) – 24/7 on call
sites.google.com/usc.edu/rsvpclientservices/home
Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086
eeotix.usc.edu
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298
usc-advocate.symplicity.com/care_report
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776
osas.usc.edu
OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 740-0411
campussupport.usc.edu
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101
diversity.usc.edu
Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
emergency.usc.edu
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call
dps.usc.edu
Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)
ombuds.usc.edu
A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or oftp@med.usc.edu
chan.usc.edu/patient-care/faculty-practice
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Students with Disabilities

The University of Southern California determines through the Office of Student Accessibility Services if/that academic accommodations are necessary to support a student with a disability. It is the academic department and faculty members’ responsibility to ensure academic accommodations are provided. It is
the student’s responsibility to submit accommodation requests in a timely manner as well as follow OSAS’s policies and procedures. OSAS personnel are available for consultation should questions and more complicated accommodation needs arise.

Students must register with Student Accessibility Services (OSAS) for each academic term that accommodations are desired. Guidelines for the OSAS accommodation process can be found at https://osas.usc.edu/.

**Emergency Preparedness/Course Continuity**

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site ([http://emergency.usc.edu/](http://emergency.usc.edu/)) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of USC’s Blackboard learning management system (blackboard.usc.edu), teleconferencing, and other technologies.

**Use Of Recordings**

Pursuant to the USC Student Handbook ([www.usc.edu/scampus](http://www.usc.edu/scampus), Part B, 11.12), students may not record a university class without the express permission of the instructor and announcement to the class. In addition, students may not distribute or use notes or recordings based on University classes or lectures without the express permission of the instructor for purposes other than personal or class-related group study by students registered for the class. This restriction on unauthorized use applies to all information that is distributed or displayed for use in relationship to the class.
Appendix I

Undergraduate Program Learning Goals and Objectives (last update 12/21/17)

Learning goal 1: Our graduates will demonstrate critical thinking skills so as to become future-oriented problem solvers, innovators and decision makers in diverse and rapidly changing business environments.

- Students will demonstrate the ability to anticipate, identify and solve business problems. They will be able to identify and assess central problems, identify and evaluate potential solutions, and translate a chosen solution to an implementation plan that considers future contingencies.
- Students will demonstrate the ability to be accurate, clear, expansive (thorough, detailed) and fair-minded in their thinking.
- Students will critically analyze concepts, theories and processes by stating them in their own words, understanding key components, identifying assumptions, indicating how they are similar to and different from others and translating them to the real world.
- Students will be effective at gathering, storing, and using qualitative and quantitative data and at using analytical tools and frameworks to understand and solve business problems.
- Students will understand the concepts of critical thinking, entrepreneurial thinking and creative thinking as drivers of innovative ideas.

Learning Goal 2: Our graduates will develop people and leadership skills to promote their effectiveness as business managers and leaders in the 21st century’s evolving work and organizational structures.

- Students will recognize, understand and analyze the roles, responsibilities and behaviors of effective managers and leaders in diverse business contexts e.g., functionally diverse, culturally diverse, geographically diverse, etc.
- Students will understand factors that contribute to effective teamwork including how to elicit, manage and leverage diverse perspectives and competencies.
- Students will recognize, understand, and analyze the motivations and behaviors of stakeholders inside and outside organizations (e.g., teams, departments, consumers, investors, auditors).

Learning Goal 3: Our graduates will be effective communicators to facilitate information flow in organizational, social, and intercultural contexts.

- Students will identify and assess diverse personal and organizational communication goals and audience information needs.
- Students will demonstrate an ability to gather and disseminate information and communicate it clearly, logically, and persuasively in professional contexts.
- Students will understand individual and group communications patterns and dynamics in organizations and other professional contexts.

Learning goal 4: Our graduates will demonstrate ethical reasoning skills, understand social, civic, and professional responsibilities and aspire to add value to society.

- Students will recognize ethical challenges in business situations and assess appropriate courses of action.
- Students will understand professional codes of conduct.

Learning goal 5: Our graduates will develop a global business perspective. They will understand how local, regional, and international markets, and economic, social and cultural issues impact business decisions so as to anticipate new opportunities in any marketplace.

- Students will understand that stakeholders, stakeholder interests, business environments (legal, regulatory, competitor) and business practices vary across regions of the world.
- Students will understand how local, regional and global markets interact and are impacted by economic, social and cultural factors.
Learning goal 6: Our graduates will understand types of markets and key business areas and their interaction to effectively manage different types of enterprises.

- Students will demonstrate foundational knowledge of core business disciplines, including business analytics and business economics
- Students will understand the interrelationships between functional areas of business so as to develop a general perspective on business management
- Students will apply theories, models, and frameworks to analyze relevant markets (e.g. product, capital, commodity, factor and labor markets)
- Students will be able to use technologies (e.g., spreadsheets, databases, software) relevant to contemporary business practices