**Meeting Schedule:**
Classroom/ hours: DMSB 110, Tuesday/Thursday 10:05am–12:50pm
Office hours: by appointment

**Instructor:**
Hugh Hoikwang Kim, PhD
Office: Darla Moore School of Business / Room 457E
Email: hugh.kim@moore.sc.edu
Office phone: (803) 777-3442

**Course Description:**
This course offers principles and tools to analyze financial investment strategies. This course will introduce you to the Modern Portfolio Theory (MPT) and applied financial economics to solve challenging investment problems. The goal of this course is to help you internalize rigorous theories in financial economics for investment management and provide you with opportunities for hands-on experience of analyzing investment strategies. We will also discuss how behavioral bias impedes individuals from adopting investment strategies developed with a full rationality assumption. We will cover real-world applications of investment practices throughout the course.

**Learning Goals:**

There are three broad categories of topics: *Investors preference and utility*, *Modern portfolio choice theory and its application*, *Factor investment and its application*.

At the end of this course, you should be able to

a. Understand rational decision-making framework for financial investment  
b. Develop quantitative skills to apply investment theories to real financial data  
c. Apply the Modern Portfolio Theory to real-world data  
d. Understand potential pitfall of Modern Portfolio Theory  
e. Recognize the mechanism of how risk factors generate a risk premium  
f. Apply multi-factor models to evaluating funds’ performance  
g. Develop efficient and effective written and oral communication skills

**Readings:**

Recommended books are “Investment, 11th edition” (2017, by Zvi Bodie, Alex Kane, and Alan Marcus. McGraw-Hill) and “Asset Management: A Systematic Approach to Factor Investing”
(2014, by Andrew Ang, Oxford University Press). The instructor will provide lecture slides and reading materials for all classes.

You will get much more out of lectures if you can review the slides after each lecture.

**Prerequisites:**

I assume you are familiar with statistical terms (e.g., mean, variance, standard deviation, covariance, correlation) and have working knowledge of MS Excel.

**Requirements:**

The final grade will be based on the mid-term exam (20%), final exam (50%), assignment (20%), and class participation (10%).

- **Mid-term exam:** The mid-term exam is an online class exam. You will be asked questions about materials in the 1st half of the class. A tentative exam day is **April 4 (Thu) – April 6 (Sat), 2019.** More information will follow.
- **Final exam:** You will have a take-home exam. Questions will be about all topics covered in the class. You will have 72 hours to submit your answers. A tentative exam day is **April 29 (Mon) – May 1 (Wed), 2019.** More information will follow.
- **Assignments and quizzes:** Assignment is based on case studies. You are encouraged to work with your classmates but need to submit individual writings. You will also participate in a virtual stock trading game, and need to submit your trading report at the end of the class. Please participate in a virtual trading game for this course here: [https://www.marketwatch.com/game/fina762fmba2019](https://www.marketwatch.com/game/fina762fmba2019).
- **Class participation:** Active participation in the class discussion is expected, and attendance is mandatory. If any unavoidable situation arises which prevents you from attending a session, you should consult with the instructor in advance.

**HBS Case Studies:**

A link to our coursepack is as follows: [https://hbsp.harvard.edu/import/618531](https://hbsp.harvard.edu/import/618531)

Following the above link, you need to create an account at HBS Publishing Inc. and order your copy of the HBS cases. We will discuss two HBS case studies: **State of South Carolina** (9-201-061) and **Partners Healthcare** (9-206-005).

**Course Website:**

The Blackboard course website is our database for class materials and assignment submissions. All class slides and related MS-Excel exercises will be uploaded to the Blackboard. All assignment announcements will be made at the Blackboard, and it is students’ responsibility to check updates regularly at the Blackboard.
Course Policy:

No late submission of assignments or exams is accepted if not permitted by the instructor in advance. You need to attend the class regularly. Absence from more than 10 percent of the scheduled sessions, whether excused or unexcused, will result in a grade penalty. Excusable absences are

- participation in an authorized University activity,
- required participation in military duties
- Mandatory admission interviews for professional or graduate school which cannot be rescheduled.
- Participation in legal proceedings or administrative duties that require a student’s presence,
- Death or major illness in a student’s immediate family,
- Illness of a dependent family member
- Religious holiday if listed on [www.interfaithcalendar.org](http://www.interfaithcalendar.org),
- Illness that is too severe or contagious for the student to attend class,
- Weather-related emergencies.

Honor Code:

The University of South Carolina Honor Code: It is the responsibility of every student at the University of South Carolina Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.
## Tentative Course Schedule (subject to change):

<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
<th>Topic</th>
<th>Note</th>
<th>Readings</th>
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<tr>
<td>1</td>
<td>Week 1</td>
<td>Introduction to the course. Asset owners and their characteristics.</td>
<td>Note: Syllabus, Ang: Ch 1–2, BKM: Ch. 1</td>
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<tr>
<td>2</td>
<td>Week 1</td>
<td>Financial assets and trading</td>
<td>BKM: Ch. 2–3.</td>
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<tr>
<td>3</td>
<td>Week 1</td>
<td>Investment companies</td>
<td>BKM: Ch. 1–4.</td>
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<td>4</td>
<td>Week 2</td>
<td><em>Case Study 1</em>: The State of South Carolina (HBS Case #201061)</td>
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<td>5</td>
<td>Week 2</td>
<td>Modern Portfolio Theory – One risky asset</td>
<td>BKM: Ch. 6.</td>
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<td>6</td>
<td>Week 2</td>
<td>Modern Portfolio Theory – Multiple risky assets 1</td>
<td>BKM: Ch.7, Ang: Ch. 3.</td>
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<td>7</td>
<td>Week 3</td>
<td>Modern Portfolio Theory – Multiple risky assets 2</td>
<td>BKM: Ch.7, Ang: Ch. 3.</td>
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<td>8</td>
<td>Week 3</td>
<td>Optimal Portfolio Choice with risk-free asset</td>
<td>BKM: Ch.7, Ang: Ch. 3.</td>
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<td><strong>Midterm Exam (online)</strong></td>
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<td>Week 4</td>
<td>Modern Portfolio Theory – Critique 1</td>
<td>BKM: Ch. 7, Ang: Ch. 2–3.</td>
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<td>10</td>
<td>Week 4</td>
<td>Modern Portfolio Theory – Critique 2</td>
<td>BKM: Ch. 7, Ang: Ch. 2–3.</td>
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<td>11</td>
<td>Week 5</td>
<td>Capital Asset Pricing Model (CAPM) 1</td>
<td>BKM: Ch. 9, Ang: Ch. 6–7.</td>
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<td>12</td>
<td>Week 5</td>
<td>Capital Asset Pricing Model (CAPM) 2</td>
<td>BKM: Ch. 9, Ang: Ch. 6–7.</td>
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<td>13</td>
<td>Week 5</td>
<td>Factor Investing 1</td>
<td>BKM: 6–7, 14, Ang: Ch. 11–13.</td>
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<td>Week</td>
<td>Topic</td>
<td>References</td>
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<td>14</td>
<td>Week 5 Factor Investing 2</td>
<td>BKM: 6–7, 14, Ang: Ch. 11–13.</td>
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<td>15</td>
<td>Week 6 Case Study 2: Partners Health (HBS Case # 206005)</td>
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<td>16</td>
<td>Week 6 Long-Run and Life-Cycle Investment 1</td>
<td>BKM: 6–7. Ang: Ch. 4–5.</td>
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<td>17</td>
<td>Week 6 Long-Run and Life-Cycle Investment 2</td>
<td>BKM: 6–7. Ang: Ch. 4–5.</td>
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**Final Exam**