Course Description
How does one go underneath financial statements to get a better handle on firm valuation? Specifically:
• Which operational indicators best suggest future financial performance?
• How does one do operational due diligence?
• What are best practices in operational turnarounds?

These questions constitute key issues in what might be called "operations forensics." This course helps students confront questions like these in their future careers as:
• private equity investors
• analysts and analyst-facing CEOs and entrepreneurs
• management consultants
• line managers, including those of not-for-profits, such as some hospitals.

Course Learning Goal
You will learn frameworks, analytical tools, industry language, and personalities. Some highlights:
• Take “inside look” at the performance assessment (Virginia Mason Medical Center) and value investing (David Berman)
• Take a broad look—e.g., ABRY feels deceived into investing in F+B. Ethical, legal issues, etc.
• Advance valuation skills based on examining operations (was Amazon on brink of bankruptcy?)
• Sharpen ability to justify investment recommendations, using fast-paced case discussions

Relationship with other Courses
Most courses in finance and accounting focus on information in financial statements, but we will focus on operational levers. There is a small overlap with the “analysis of operation” section of GSBA 518 Accounting Control Systems. Given that this is an
operations course, we will not focus on finance or accounting issues such as valuation, except the connection from operations to these topics.

**Textbook**


Also required is the case booklet from the USC bookstore.

**Supplementary Reference Books**


**Assignments and Grading Detail**

The course grade, which will be curved, is based on 10% class contributions, 50% individual case analysis, and 40% team project. All assignments are due by 9 pm day before class through Turnitin on Blackboard (I want you to get some sleep).

1) 10% on class contributions; I count mainly your examples and elaborations of the lecture material.

2) 50% on case analysis; Individual effort expected.
   i) 20% on discretionary case (choosing one case among David Berman, ABRY Partners and F+W Publications, and Virginia Mason Medical Center).
   Expect to write around 3 to 6 pages of text (12-point font, 1.5 line spacing, 1-inch margins all round), and 0 to 4 pages of exhibits. Entire submission must be in only one file.
   ii) 30% on Pilgrim Bank (A): Customer Profitability
   Expect to write around 4 to 8 pages of text (12-point font, 1.5 line spacing, 1-inch margins all round), and 0 to 6 pages of exhibits.

3) 40% on team project.
   Each team ideally has 4 to 5 members. Expect to write 20-30 pages double-spaced, excluding exhibits. Topic fairly open; examples:
   a) Undertake due diligence on a donut store on Walnut Street
   b) Modify the “Altman Z-score” to predict technological disruptions instead of bankruptcy
   c) Beer and Nohria wrote an HBS paper distinguishing “E” and “O” turnarounds. Use their criteria to codify turnarounds based on newspaper reports, and run a regression to see which types are more likely to succeed.

Grading criteria:
   - Well-motivated question
   - Data-driven analysis.
Principle-driven analysis. Since this is an operations management course, by “principle,” I mean your favorites like linear programming, Little’s Law, the queuing formula, the customer throughput loss formula, and the newsvendor formula, etc.

Creativity—e.g., dig into trash bins for data (might need permission; don’t do anything illegal).

10-minute presentation in class on the last day.

Proposal due mid-quarter, not graded. One page to include: (1) question and its motivation, (2) data to be gathered, (3) analyses to be undertaken. I will provide assistance—e.g., what you could read to refine the project.

To facilitate learning, we will make the team reports available to all students.

MARSHALL GUIDELINES

For Students with Disabilities
Any student requesting academic accommodations based on disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your instructor as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Notice on Academic Integrity
The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tensions accompanying examinations. When a clear violation has occurred, however, the instructor may disqualify the student’s work as unacceptable and assign a failing mark on the paper. There may be additional penalties, including failing the course, in accordance to the university policies, as listed in the SCampus.

Turnitin Technologies
USC is committed to the general principles of academic honesty that include and incorporate the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one’s own academic work from misuse by others as well as to avoid using another’s work as one’s own. By taking this course, students are expected to understand and abide by these principles. All submitted work for this course may be subject to an originality review as performed by Turnitin technologies (http://www.turnitin.com) to find textual similarities with other Internet content or previously submitted student work. Students of this course retain the copyright of their own original work, and Turnitin is not permitted to use student-submitted work for any other purpose than (a) performing an originality review of the work, and (b) including that work in the database against which it checks other student-submitted work.
**Course Schedule**
The chapters refer to those in the text, “Operations Forensics.” Please read the case and be prepared for the discussion before coming to the class. This syllabus is an invitation to students to engage in an exciting and interactive study of operations performance analysis. The learning environment will be collaborative and supportive; we will learn from one another both in and out of the classroom. To that end, modifications to this syllabus might be warranted as determined by the instructors as we assess the learning needs of this particular class of students.

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Topics</th>
<th>Assignments due 9 pm the night before</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M 1/11</td>
<td>Introduction to Operations Performance Analysis</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>W 1/13</td>
<td>What Financial Statements May or May Not Reveal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M 1/18</td>
<td>Martin Luther King Day</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>W 1/20</td>
<td>Indicators of Accounting Performance</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>M 1/25</td>
<td>Case: David Berman</td>
<td>(Optional) Report Due 9 pm 1/24</td>
</tr>
<tr>
<td>5</td>
<td>W 1/27</td>
<td>Case: ABRY Partners and F+W Publications</td>
<td>(Optional) Report Due 9 pm 1/26</td>
</tr>
<tr>
<td>6</td>
<td>M 2/1</td>
<td>Assessing the Customer Base</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>W 2/3</td>
<td>Case: Pilgrim Bank (A): Customer Profitability</td>
<td>Required Report Due 9 pm 2/2</td>
</tr>
<tr>
<td>8</td>
<td>M 2/8</td>
<td>Guest Speaker</td>
<td>Team Proposal Due 9 pm 2/7</td>
</tr>
<tr>
<td>9</td>
<td>W 2/10</td>
<td>Linking Performance and Balanced Scorecard</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M 2/15</td>
<td>Presidents’ Day</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>W 2/17</td>
<td>Various Aspects of Turning Around</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>M 2/22</td>
<td>Case: Virginia Mason Medical Center</td>
<td>(Optional) Report Due 9 pm 2/21</td>
</tr>
<tr>
<td>12</td>
<td>W 2/24</td>
<td>Final Team Presentation</td>
<td>Team Report Due 9 pm 2/23</td>
</tr>
</tbody>
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**Lunches with the Professor**
I enjoy getting to know students better. Not mandatory. Sign up for (free!) meals with me. Preference to those who have not met with me before.

**Course Outline**

Session 1 – 1/11 (Monday) Introduction to Operations Forensics
*Question:* What is Operations Forensics?

**Module 1: Operational Indicators (chapters 2 - 4)**

Session 2 – 1/13 (Wednesday) What Financial Statements May or May Not Reveal
*Question:* How to infer business models and customer types from the financial statements?
*Reading:* The Case of Unidentified Industries - 2013 (in Course Reader)

Session 3 – 1/20 (Wednesday) Indicators of Accounting Performance
*Question:* What are the indicators of current and future performance? What are ROA trees?
*Reading:* Chapter 6-Link between Operations and Finance, *Matching Supply with Demand*

Session 4 – 1/25 (Monday) Case: David Berman
*Question:* What is David Berman’s business model? What are the strengths and weaknesses?
*Reading:* Schlosser, *King of the Retail Jungle*, Fortune, 2005

**Module 2: Operational Due Diligence (chapters 7 - 9)**

Session 5 – 1/27 (Wednesday) Case: ABRY Partners and F+W Publications
*Question:* Will you advise ABRY to file the lawsuit? Was ABRY defrauded?
*Reading:* Cullinan, Le Roux, and Weddigen, When to Walk Away from a Deal, *HBR*, 2004

Session 6 – 2/1 (Monday) Assessing the Customer Base
*Question:* What should due diligence seek? How to measure customer profitability?
*Reading:* Kaplan, When to Drop an Unprofitable Customer, *HBR*, 2012

Session 7 – 2/3 (Wednesday) Case: Pilgrim Bank (A): Customer Profitability
*Question:* How do retail banks make money? How profit varies across customers?

Session 8 – 2/8 (Monday) Guest Speaker

**Module 3: Operational Turnarounds (chapters 12 - 15)**

Session 9 – 2/10 (Wednesday) Linking Performance and Balanced Scorecard
*Question:* So we’ve invested. What to consider when forming a new strategic plan?
Reading: ------, Putting the Balanced Scorecard to Work, *HBR*, 1993
Reading: ------, Using the Balanced Scorecard as a Strategic Management System, *HBR*, 1996
Reading: ------, Having Trouble with Your Strategy? Then Map It, *HBR*, 2000
Reading: ------, Measuring the Strategic Readiness of Intangible Assets, *HBR*, 2004
Reading: Texas Eastman Co. (in Course Reader)

Session 10 – 2/17 (Wednesday) Various Aspects of Turning Around
*Question*: So we’ve invested. How to turn around the situation?
Reading: ------, The Process Audit, *HBR*, 2007
Reading: Areva T&D (in Course Reader)

Session 11 – 2/22 (Monday) Case: Virginia Mason Medical Center (Abridged)
*Question*: What is Gary trying to achieve at Virginia Mason? How does TPS fit into the strategy?
Reading: Beer and Nohria, Cracking the Code of Change, *HBR*, 2000
Reading: Spear, Fixing Health Care from the Inside, Today, *HBR*, 2005

Session 12 – 2/24 (Wednesday) Final Team Presentation