The University of Texas at Tyler  
College of Business & Technology

FINA 4355/5355: Oil, Gas and Energy Finance  
Spring 2019  
Sections 060 (Full Distance Learning/Online) Course Nos. 21505/21506 (4355/5355)

Instructor: Dr. Chen (Ken) Wu  
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Telephone: (903) 565-5847  
Office Hours: Monday-Friday, 8:30-9:30AM except holidays or posted otherwise on Canvas. Please email for appointments outside these posted hours.

Communications with the Instructor

I check email often on weekdays and will frequently be in my office. If you want to meet me for any reason outside of office hours shown above, please email for an appointment. For all email communications, you can expect a response within 24 hours except for those sent on holidays or between 5 pm on Friday and midnight on Sunday, when you can expect a response within 48 hours.

Email policy: As mandated by the University, I will only send emails to your Patriot email accounts. Emails from non-Patriot email accounts will NOT be answered.

Course Objective

This is an introductory course designed to provide students with a basic understanding of the economics and finance of energy, in particular petroleum (oil) and (natural) gas. The course will begin with discussion of the scientific and technological foundations of oil and gas production, refining, transport and consumption. Next we will investigate financing schemes for oil and gas production. In other words, we will cover the organization of oil and gas industry into oil majors, national oil companies, partnerships etc. Then we will cover the economics of oil and gas production as well as evaluation of oil and gas projects plus the trading of oil and gas in derivatives markets, including options and futures. Then we will discuss generally accepted consequences of increased concentrations of carbon dioxide in the atmosphere as direct a result of consumption of fossil fuels. Finally, for the graduate students enrolled in Fina 5355, we will discuss the growing push for use of renewable energy and the threat this poses to oil and gas industry.

Upon completion of the course you should be able to:
  • Describe evolution of human use of energy and geological origins of fossil fuels.
  • Describe basic process of extraction of oil and gas.
  • Describe main uses of oil and gas and how they are transported and made ready for end consumption.
  • Describe basic organization of oil and gas industry.
• Explain economics of their production and how they are traded on futures exchanges.
• Explain the basic idea behind concerns about global warming from burning of fossil fuels and how this is prompting nations to consider switching to renewable energy.

Course Structure

To achieve the course objectives listed above, students will be required to:

1. Watch Tegrity lectures and read Powerpoint course slides and chapters assigned from required textbook.
2. Visit course Canvas regularly.
3. Take every unit quiz.

Required Textbook and Internet Access

• Students should have basic Internet, word-processing, spreadsheet, and email skills. Frequent checking of Canvas announcements and postings is strongly encouraged.
• Class materials are generally in the form of Word, Powerpoint, Excel and pdf files. Students can download Word, Excel or Powerpoint Viewer if they do not have Microsoft Word, Excel or Powerpoint installed on their computer. Adobe Acrobat Reader (which is free) is needed to read pdf files.

Canvas Access

All class materials, course grades, and class announcements will be posted by Canvas. Your account on Canvas has already been created automatically by the Canvas administrator. The Canvas user name and password combination is the one you use for UT Tyler student email. For more detailed information, please visit UT Tyler’s homepage and click on the link for “Current Students” and follow the link to Canvas. Please contact the Canvas administrator if you have any problem accessing Canvas. Students are required to maintain their current e-mail address with Canvas as it uses this address to send course-related electronic communications.

*If you have issues with Canvas access that may hinder your completion of module quizzes, you must inform the instructor by email immediately. If the issue cannot be resolved by the instructor, he will ask you to contact UT Tyler’s IT Support staff immediately (even on weekends) for further assistance and get a ticket number.*
of Canvas access problems reported to the instructor after the passing of quiz deadlines or without a ticket number from UT Tyler’s IT Support staff when you have been asked to obtain one will be immediately dismissed. All Canvas-related issues are regarded as personal-level access issues except for cases of system-wide Canvas issues reported by the university and you must get them resolved without letting them interfere with your coursework.

Eight Unit Quizzes

A quiz will be given for each unit that cover related topics. Each quiz will contain 20 questions and is worth 100 points and you will have 60 minutes to complete it. Students enrolled in Fina 4355 are only required to take any six of the eight unit quizzes while those enrolled in Fina 5355 are required to take any seven of the eight unit quizzes. All students are welcome to attempt more unit quizzes than what is required for extra credit. Note there will be no other exams in this course. You will complete the material in each unit at your own pace and take the unit quiz during the quiz period shown in the course calendar at the end of this syllabus. You can take the quiz at any time during the quiz period. Note that you are allowed only two attempt per unit quiz so please make sure you study the unit material thoroughly before you begin and can devote sufficient time to complete the quiz using a stable Internet connection. Each quiz period begins and ends at NOON (central time) and NOT MIDNIGHT on the dates shown in the course calendar. Please note that each unit quiz will be only available for a limited time so check the course calendar and plan accordingly. Note that only one question will be shown at a time and you cannot go back and change the answer of a previous question. You will be able to see the answers you chose at the end of the quiz.

You are allowed two attempts for each unit quiz. However, keep in mind that if you take a quiz more than once, the score used to compute your course grade will be the higher of the two scores. As an example, if you received scores of 80 and 70, respectively on the two attempts for a unit quiz, then the quiz score used to compute the course grade will be 80. Please also remember that the questions on the two attempts will be different because each time you try to take a quiz, Canvas will randomly select the questions for your quiz from a pool of questions the instructor uploaded for that particular unit. No one will be allowed to take any of the unit quizzes more than twice for any reason except in cases of Canvas system-wide outage as reported and documented by the University’s IT Support staff affecting both of the first two quiz attempts. Only then will a third attempt be allowed by the instructor, on a case-by-case basis, by clearing one of the previous attempts. All other requests to clear unit quiz attempts will be rejected.

All material covered in readings, slides and Tegrity classes are considered fair game for unit quizzes. You are advised to begin each unit by watching the brief Tegrity class introducing the topic and then read the Powerpoint slides and the assigned chapter(s) in course text for a more in-depth understanding of the topic. But Tegrity classes and Powerpoint slides are no substitute for reading the text. In fact, the majority of unit quizzes will consist of questions randomly selected from a pool of questions primarily based on the reading of the textbook so it is crucial you read the chapter(s) assigned
very carefully and study accordingly. Note that because students take unit quizzes at different times, each student will face a different set of questions drawn randomly from the pool of quiz questions created for each unit.

**Note: You will need access to Microsoft Excel to answer some of the questions/problems on Unit 7 Quiz.**

When seeking email assistance from the instructor on a unit quiz for any reason, you must clearly state (1) the course you are enrolled in, (2) the unit quiz where you encountered difficulties and (3) a brief description of the difficulty. Any email missing any of the three items listed above will be ignored. You will be asked to provide the missing information by the instructor and no action will be taken until it is received.

See the section below titled “Appeal” to understand how to appeal when you suspect a grading error has taken place or when you seek explanations of questions you missed on a quiz.

**Course Information Quiz**

This is a 15-minute multiple-choice quiz designed to test your knowledge of the course requirements (for both Fina 4355 and Fina 5355) as explained in the syllabus. In other words, regardless of whether you are enrolled in Fina 4355 or Fina 5355, you should read and know the course policies regarding both as questions on both Fina 4355 and Fina 5355 may appear on the Course Information Quiz because this is a mixed section course. As an example, you may be asked how many module quizzes are available and how many points they are worth as well as other course policies. It will be given via Canvas only between noon (central standard time) Monday, Jan 14, 2019 and noon (central standard time) Tuesday, Jan 22, 2019. You may earn up to 50 points on this quiz and anything above 25 is counted as extra credit.

All module quiz policies as described above apply to the Course Information Quiz. In particular, you are only allowed two attempts and the higher of the two scores (if you choose to take it more than once) will count. Third attempts will only be allowed if system-wide Canvas issues interrupted both quiz attempts.

**Grading**

<table>
<thead>
<tr>
<th>Course</th>
<th>Points Possible</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fina 4355</td>
<td>25</td>
<td>Course Information Quiz</td>
</tr>
<tr>
<td></td>
<td>600</td>
<td>6 (out of 8) Unit Quizzes</td>
</tr>
<tr>
<td></td>
<td>625</td>
<td>Total</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Fina 5355</th>
<th>Points Possible</th>
<th>Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25</td>
<td>Course Information Quiz</td>
</tr>
</tbody>
</table>
Your course grade is computed using the following procedure (so you can use it to monitor your performance in the course at any time): (1) Points earned from Course Information Quiz (see below) and all module quizzes taken will be summed as well as extra credit homework assignments for modules 4, 5 and 7, (2) The total number of points earned as computed in previous step will be divided by 625 (Fina 4355) or 725 (Fina 5355) to obtain a percentage, (3) The percentage obtained in previous step will be converted into a letter grade according to the grading scale shown above.

Note: You can always estimate your grade following the procedure outlined above and ALL (EMAIL, TELEPHONE or IN-PERSON) request to confirm or verify grades will be REFUSED. The instructor is not allowed to disclose grades using email and once the 12 noon May 2, 2019 deadline to take the final unit quiz passes, your final course grade will be posted shortly thereafter in the Canvas grade center.

Canvas has a grade calculation feature that produces percentages which differ from what is shown above. In particular, extra credit assignments are factored in consideration of total number of points possible. The instructor has no control over how this feature does the grade calculations so you generally CANNOT rely on the grade shown in Canvas but must use the procedure described above to estimate your grade because they are unlikely to be the same except under some rare circumstances.

Extra Credit

All students will have opportunities to earn extra credit from five of the ten questions on the Course Information Quiz and three optional homework assignments (from Units 4, 5 and 7) worth 25 points each. Students in Fina 4355 can take up to two optional extra credit unit quizzes while those in Fina 5355 have the option of taking an optional extra credit unit quiz.

WARNING: Since you will be given ample opportunities to earn extra credit throughout the course, attempts to change your grade at the end of the semester by asking the instructor to “round up” or by asking for further extra credit will be ignored.

UT Tyler Honor Code
Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

**Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler including the areas listed below, please follow this link: [http://www.uttyler.edu/wellness/rightsresponsibilities.php](http://www.uttyler.edu/wellness/rightsresponsibilities.php)

- Academic Dishonesty
- Academic Grievances
- Alcohol, Tobacco and Other Drug Policies
  - Permission to Serve Alcoholic Beverages Form
- Athlete Conduct Policy
- Student Conduct
- Rules and Regulations of the Board of Regents
- Disciplinary Procedures – (Manual of Policies and Procedures for Student Affairs - Chapter 8)
- Family Educational Rights and Privacy Act (FERPA)
- Hazing
- Nondiscrimination Policy and Complaint Procedure
- Speech, Expression, and Assembly – (Manual of Policies & Procedures for Student Affairs - Chapter 6)
- Student Right-to-Know and Campus Security Act

**Disability/Accessibility Services**

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit [https://hood.accessiblelearning.com/UTTyler](https://hood.accessiblelearning.com/UTTyler) and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at [http://www.uttyler.edu/disabilityservices](http://www.uttyler.edu/disabilityservices), the SAR office located in the University Center, # 3150 or call 903.566.7079.

**UT Tyler Resources for Students**
Syllabus Revisions

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement via Canvas with adequate time for students to make the necessary coursework adjustments.

**Tentative Fin 4355/5355 Course Calendar**

**Spring 2019**

Note: SS refers to the required course textbook by Betty and Russell Simkins.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Unit</th>
<th>Topic</th>
<th>Reading</th>
<th>Key Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/14</td>
<td>1</td>
<td>Course Info Quiz; Introduction</td>
<td>SS Ch.2</td>
<td>Course Info Quiz (1/14 - 1/22)</td>
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<tr>
<td>2</td>
<td>1/21</td>
<td>1</td>
<td>Introduction</td>
<td>SS Ch.3</td>
<td>Unit 1 Quiz: Thu.,1/24-Thur.,1/31</td>
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<tr>
<td>3</td>
<td>1/28</td>
<td>2</td>
<td>From Ground to Consumer</td>
<td>SS Ch.5</td>
<td>Census Date (1/28)</td>
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<tr>
<td>4</td>
<td>2/4</td>
<td>2</td>
<td>From Ground to Consumer</td>
<td>SS Ch.5</td>
<td>Unit 2 Quiz: Thu.,2/7-Thur.,2/14</td>
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<tr>
<td>5</td>
<td>2/11</td>
<td>3</td>
<td>Financing and Fiscal Regime</td>
<td>SS Ch.12</td>
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<tr>
<td>6</td>
<td>2/18</td>
<td>3</td>
<td>Financing and Fiscal Regime</td>
<td>SS Ch.13</td>
<td>Unit 3 Quiz: Thu.,2/21-Thur.,2/28</td>
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<td>7</td>
<td>2/25</td>
<td>4</td>
<td>Oil and Gas Economics</td>
<td>SS Ch.10</td>
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<tr>
<td>8</td>
<td>3/4</td>
<td>4</td>
<td>Oil and Gas Economics</td>
<td>SS Ch.10</td>
<td>HW 1 Due at noon on Tue., 3/5</td>
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<tr>
<td>9</td>
<td>3/11</td>
<td></td>
<td>Spring Break</td>
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<td>Unit 4 Quiz: Thu.,3/7-Thur.,3/21</td>
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<tr>
<td>10</td>
<td>3/18</td>
<td>5</td>
<td>Oil and Gas Derivatives</td>
<td>SS Ch.16</td>
<td>HW 2 Due at noon on Tue., 3/19</td>
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<td>11</td>
<td>3/27</td>
<td>5</td>
<td>Oil and Gas Derivatives</td>
<td>SS Ch.17</td>
<td>Unit 5 Quiz: Thu.,3/21-Thur.,3/28</td>
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<tr>
<td>12</td>
<td>4/1</td>
<td>6</td>
<td>Consequences of Fossil Fuel Use</td>
<td>None</td>
<td>Last Day to Withdraw (4/1)</td>
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<tr>
<td>14</td>
<td>4/15</td>
<td>7</td>
<td>Forecasting and Time Series</td>
<td>None</td>
<td>HW 3 Due at noon on Tue., 4/16</td>
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<td>15</td>
<td>4/22</td>
<td>8</td>
<td>Future of Oil and Gas</td>
<td>SS Ch.4</td>
<td>Unit 7 Quiz: Thu.,4/18-Thur.,4/25</td>
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<td>16</td>
<td>4/29</td>
<td>8</td>
<td>Future of Oil and Gas</td>
<td>SS Ch.6</td>
<td>Unit 8 Quiz: Thu.,4/25-Thur.,5/2</td>
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</tbody>
</table>

Note 1: HW 1, 2 and 3 are optional for both Fina 4355 and Fina 5355
Note 2: Units 7 and 8 are optional for Fina 4355 but Unit 7 is required for Fina 5355
Note 3: All quizzes begin/end at noon Central Standard or Daylight Savings Time
Note 4: You will need Excel during Unit 7 Quiz