Name of Department: Chemical Engineering  
Course Title: Thermodynamics II

<table>
<thead>
<tr>
<th>Course Code: CHE 321</th>
<th>Type of Course: mandatory</th>
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<tr>
<td>Level of Course:</td>
<td>Semester/Trimester:</td>
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<tr>
<td>undergraduate</td>
<td>semester</td>
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<tr>
<td>Year of Study:</td>
<td>ECTS Credits:</td>
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<tr>
<td>3 hrs/wk; 3rd year, 1st semester</td>
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<td>Pre-requisite:</td>
<td>Co-requisite:</td>
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Name of Lecturer: Assoc. Prof. Fikret Inal, Assoc. Prof. Funda Tihminlioglu

Objective of the course:
The aim is to help students to understand the principles of thermodynamics and to acquire proficiency in applying these principles to solve a variety of practical problems in chemical engineering.

Course Contents:
- Thermodynamic Properties of Real Substances
- Equilibrium and Stability in One-Component Systems
- Thermodynamics of Multi-component Mixtures
- Estimation of the Gibbs energy and Fugacity of a Component in a Mixture
- Vapor-Liquid, Gas-Liquid, Liquid-Liquid Equilibrium
- Chemical Equilibrium
- Mixture Phase Equilibria Involving Solids
- Some Biochemical Applications of Thermodynamics

Bibliography:

Assessment Methods:
- Homework assignments: 10%
- Midterm exams:
  - Exam I: 25%
  - Exam II: 25%
- Final exam: 40%

Exams:
- Exam I: Nov. 4, 2008 (Tuesday) @ 1045
- Exam II: Dec. 16, 2008 (Tuesday) @ 1045
- Final Exam: Jan. 6, 2009 (Tuesday) @ 930

Lecture:
Section A (Dr. F. Tihminlioglu)  
**Tue. 1045 – 1230 (Room # D7)**  
**Wed. 1510 – 1615 (Room # D7)**

Section B (Dr. F. Inal)  
**Tue. 1045 – 1230 (Room # D6)**  
**Wed. 1510 – 1615 (Room # D6)**

Office Hours:
- **Dr. Fikret Inal** (Room # Z52)  
  **Tue. 1510 – 1615**
- **Dr. Funda Tihminlioglu** (Room # B159)  
  **Tue 1510 – 1615**

TAs:
- **Section A:** Onur Ozcalik
- **Section B:** Alev Gunes

CHE 321 Fall 2008