<table>
<thead>
<tr>
<th>Course Information</th>
<th>Instructor Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry II</td>
<td>Antwan Daniels</td>
</tr>
<tr>
<td>Summer 2017</td>
<td><a href="mailto:adaniels@dcccd.edu">adaniels@dcccd.edu</a></td>
</tr>
<tr>
<td>CHEM-2425-36001</td>
<td>(972) 860-5287</td>
</tr>
<tr>
<td>M/T/W/R Days and 9:00-2:30 PM Time Lecture M101 Lab M202</td>
<td>Office Hours M225D Wednesday 3:00 PM</td>
</tr>
</tbody>
</table>

### Course Description

Organic Chemistry 2425 is the second semester of a two-semester sequence. The subject matter of organic chemistry is a necessary component of many different courses of study. Person working in health care, agriculture, environmental testing, pollution control, biological sciences and the chemical industry require knowledge of this subject. Enrollment in this class requires a thorough knowledge of organic chemistry I. Topics introduced in that course will be expanded in depth and detail. Subjects covered in the second semester include: bonding, radical reactions, reaction mechanisms, spectroscopy, resonance, aromatic rings, Functional group additions and synthesis and introduction to carbohydrate chemistry. Lab safety, identification of and familiarization with lab equipment, common laboratory procedures, and the uses of various instrumental methods of analysis will be strengthened.

### Required Course Materials:

**Required textbook:**

**Lab Manual:**

**Lab Goggles/Lab Apron:**
Instructor approved protective eyewear (lab goggles) MUST be worn at all times in the laboratory. No student will be allowed to participate in lab without eye protection. (required). Students provide their own lab apron or coat.

**Laboratory Notebook:**
A sewn bound laboratory notebook and 1-2 permanent ink pens, available at local bookstores, are necessary for the recording of laboratory data. (required)

### Course Prerequisites

1. MATH 1314 or equivalent and
2. Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or,
3. have met the Texas Success Initiative (TSI) Reading standard. High school chemistry is strongly recommended.

Completion of Organic Chemistry 2423 with a C grade or higher

### Disclaimer –

The instructor reserves the right to amend this syllabus as necessary to best educate students.

### Texas Core Objectives for Student Learning

The College defines essential knowledge and skills that students need to develop during their college experience. These general education competencies parallel the Texas Core Objectives for Student Learning. In this course, the following skills are in focus.
1. **Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

2. **Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication.

3. **Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

4. **Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

5. **Personal Responsibility** - to include the ability to connect choices, actions and consequences to ethical decision-making

6. **Social Responsibility**: to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities

---

**Student Learning Outcomes: Lab**

1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
3. Conduct basic laboratory experiments with proper laboratory techniques.
4. Make careful and accurate experimental observations.
5. Relate physical observations and measurements to theoretical principles.
6. Interpret laboratory results and experimental data, and reach logical conclusions.
7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
8. Design fundamental experiments involving principles of chemistry
9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

**Student Learning Outcomes: Lecture**

1. Structure, bonding and geometry of organic compounds.
2. Nuclear Magnetic Resonance Analysis
3. Conjugation, Resonance and Diene reactions
4. Manipulation and rearrangement of alkanes for synthesis.
5. Benzene and aromatic compound synthesis and substitutions.
8. Nucleophilic additions to Aldehydes and Ketones.
10. Nucleophilic Acyl Substitution

CVC Learning Signature

CVC's Learning Signature is One College Transforming Lives. Cedar Valley College establishes clear expectations for students through engagement and empowerment leading to excellence.

CVC Faculty and Staff expect students to:
- take responsibility for their own learning
- commit to achieving high academic performance
- be meaningfully engaged in the campus community

CVC Faculty and Staff expect to:
- provide students a clear pathway of instruction
- establish clear learning outcomes
- serve as role models and mentors for students

Course Outline

For maximum success in this course you should spend a minimum of 9 hours per week working on course material.

| Week 1          | T: CH. 14 Nuclear Magnetic Resonance (H.W.#1)  
|                 | W: CH. 15 Radical Reactions Review  
|                 | R: CH. 14/15 Review (Quiz #1) (Lab #1 Safety/Organic I Review)  
|                 | F: CH. 16 Dienes (Lab #2 Williamson Synthesis of Ethers)(Exam #1)  
| Week 2          | M: CH. 16 Conjugation/Resonance/Dienes (H.W. #2)  
|                 | T: CH. 17 Benzene and Aromatic Compounds  
|                 | W: CH. 18 Reactions of Aromatic Compounds (Quiz #2)  
|                 | (Lab #3 Nitration of Methyl Benzoate)  
|                 | R: CH. 18 Reactions of Aromatic Compounds (Exam #2)  
|                 | (Lab #4 Grignard Synthesis of Triphenol Methanol)  
| Week 3          | M: CH. 19 Carboxylic Acid (H.W. #3)  
|                 | T: CH. 20 Carbonyl Chemistry-Oxidation/Reduction  
|                 | W: CH. 20 Continued (Quiz #3) (Lab #5 Aspirin Handout)  
|                 | R: CH. 21 Aldehydes and Ketones (Lab #6 Synthesis of Dibenzyl Acetone) (Exam #3)  
| Week 4          | M: CH. 22 Carboxylic Acid Substitution (H.W. #4)  
|                 | T: CH. 23 Substitution Reactions of Carbonyl Compounds  
|                 | W: CH. 24 Carbonyl Condensation (Quiz #4) (Lab #7 Sand Mayer Reaction)  
|                 | R: CH. 25 Amines (Lab#8 Synthesis of Isoamyl Acetate) (Exam #4)  
| Week 5          | M: CH. 26 Carbon-Carbon Bond Formation (H.W. # 5)  
|                 | T: CH. 27 Pericyclic Reactions (H.W. #5)  
|                 | W: CH. 28/29 Carbohydrates & Amino Acids (Quiz #5)  
|                 | R: ACS Final Exam  

Exam Schedule:
Exams will open on Thursday 12:00 PM in the Testing Center and will be picked up at 10:00 AM the following Monday from the testing center. ACS Exam will be administered in the classroom.
Lab Schedule:  

**Week 1**: #1 Safety and Organic Review/#2 Williamson Synthesis  
**Week 2**: #3 Nitration of Methyl Benzoate/ #4 Grignard Synthesis  
**Week 3**: #5 Synthesis of Aspirin/#6 Synthesis of Dibenzyl acetone  
**Week 4**: #7 Sand Mayer Reaction/#8 Synthesis of Isoamyl Acetate

Evaluation Procedures  
At the beginning of the course, the instructor provides a schedule of examinations and assignments that contribute to the final grade in the course for each student.

Exams and Assignments  
The final grade for the course reflects evaluation of the student’s work on the following assignments that are calculated as follows:

- 4-exams, 8-lab reports, 5-Online homework assignments, ACS Final exam, and 5-quizzes.

There are a total of 1000 points available in this course. They are acquired as follows:

<table>
<thead>
<tr>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
</tr>
<tr>
<td>Exam 2</td>
</tr>
<tr>
<td>Exam 3</td>
</tr>
<tr>
<td>Exam 4</td>
</tr>
<tr>
<td>ACS Final Exam</td>
</tr>
<tr>
<td>Homework (McGraw-Hill)</td>
</tr>
<tr>
<td>(mandatory submit through McGraw-Hill)</td>
</tr>
<tr>
<td>Quizzes</td>
</tr>
<tr>
<td>Laboratory</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Grading Scale  

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>Grade</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>90%-100%</td>
<td>A</td>
<td>900-1000</td>
</tr>
<tr>
<td>80%-89%</td>
<td>B</td>
<td>800-899</td>
</tr>
<tr>
<td>70%-79%</td>
<td>C</td>
<td>700-799</td>
</tr>
<tr>
<td>60%-69%</td>
<td>D</td>
<td>600-699</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
<td>0-579</td>
</tr>
</tbody>
</table>

**Last Day to Drop is Aug. 3, 2017**

Stop Before you Drop  
Under a Texas law (TEC Section 51.907), if you drop too many classes without having an acceptable reason, **your GPA could be affected**. Be sure you understand how this law may affect you before you drop a class. **Last Day to Drop Class is Aug. 3 2017 (Thursday)**

The law applies to students who enroll in a Texas public institution of higher education (including the colleges of DCCCD) for the first time in fall 2007 or later. Under this law, you may not drop more than six classes without an acceptable reason during your entire
undergraduate career without penalty. For more information, please see our [catalog](http://www.dcccd.edu) or read [Facts About Dropping Classes](http://www.dcccd.edu/Why/Reg/Registration/Pages/DropWithdraw.aspx).

If you drop or withdraw before the official drop/withdrawal deadline, you will receive a grade of W (Withdraw) in each class dropped until the seventh unacceptable drop. You will earn a grade of WF for the seventh unacceptable drop, and each unacceptable drop after that. A grade of WF will be calculated in your GPA as an F.

The deadline for receiving a W is indicated on the [academic calendar](http://www.dcccd.edu/Why/Reg/Registration/Pages/DropWithdraw.aspx) and the current class schedule. For more information, you may access:

http://www.dcccd.edu/Why/Reg/Registration/Pages/DropWithdraw.aspx

The Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. This class **may not** be repeated for the third or subsequent time without paying the additional tuition. Third attempts include courses taken at any of the Dallas County Community Colleges since the fall 2002 semester. More information is available at:

http://www.dcccd.edu/PC/Cost/3rdCrseAttmpt/Pages/default.aspx

### Attendance Policy

In general, daily class attendance enhances student achievement of an A, B or C in the course. Students need to advise instructors of illness, work or family situations that may require absence from a class to receive one class day full-grade exception. Non-advising of class absence will result in 10% the 1st day, 30% the 2nd day deduction of assessment grade. Exams must be made up within 1 class day of assessment date. Labs must be made up as agreed upon by instructor.

### Classroom Policies

Students are to use cell phone devices outside of class unless asked to use for classroom assignment. Students are not to eat or drink in the laboratory (even if chemicals are not present)

### Tutoring Services

All tutoring is available on a "drop in" basis; however, if you would like to make an appointment for a specific time, please call 972-860-2974. We encourage you to make an appointment for all written assignments. During each visit to the center, you will use your student ID# to sign in and out on our computer at the front desk. More information is available at:

http://www.cedarvalleycollege.edu/FutureStudents/StudentServices/TutoringServices/default.aspx
QUALITY ENHANCEMENT PLAN
Cedar Valley College's Quality Enhancement Plan is designed to improve student learning in mathematics. Read more about our QEP at:  
http://www.cedarvalleycollege.edu/QEP/default.aspx

INSTITUTIONAL POLICIES

Academic Advising

Academic Advising is a collaborative educational process whereby students and their advisors are partners in meeting the students' academic, personal, and career goals. This partnership is a process that is built over the student’s entire educational career at Cedar Valley College.

Educational planning is available to all students. First time in college students must meet with academic advisors prior to enrolling in classes; however, continuing students may choose to see faculty advisors, faculty counselors, and/or program coordinators after classes begin. All parties have clear responsibilities for ensuring a successful partnership. For more information, you may access:  
https://www.cedarvalleycollege.edu/FutureStudents/StudentServices/AcademicAdvising/Pictures/AdvisingSyllabus.pdf

Academic Honesty

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. See Also Student Code of Conduct.  
https://www1.dcccd.edu/catalog/ss/code.cfm?loc=CVC

ADA Statement

If you are a student with a disability and/or special needs who requires accommodations, please contact the college Disability Services Office at 972-860-8119.

Emergency Alert

Sign up for DCCCD Emergency Alerts to receive a text-message, email and/or phone call when there is an unscheduled evacuation or closure of a DCCCD campus or office because of weather closures, utility outages, police or other emergencies. Subscribing is free, but standard text message charges from your cell phone provider will apply. Please refer to:  
http://www.dcccd.edu/SS/OnlineSvs/EmergAlerts/Pages/default.aspx
Financial Aid

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. Students who fail to attend or participate after the drop date are also subject to this policy.

Health Center Services

Basic first aid for minor cuts, scrapes, insect stings, and heat, etc.

- Over-the-counter medications for headaches, fever, seasonal allergies, and colds
- Over-the-counter medications for mild allergic reactions
- Emergency sanitary pads
- Blood Pressure check
- Coordination with outside health agencies such as Carter Blood Care; Dallas County Health Dept. (HIV/STD testing--free, twice a semester); UT Southwestern mobile mammography; Immunizations once a month for children <19 y.o. from the DCDHHS; Agape Massage; and Employee Wellness Screening
- Rest area for stress relief, migraine headaches, post seizure activity
- AED (Automatic External Defibrillator) for CPR
- Confidential "talks"
- Assists with health related club activities when asked and time permits

Religious Holidays

Absences for observance of a religious holy day are excused. A student whose absence is excused to observe a religious holy day is allowed to take a make-up examination or complete an assignment within a reasonable time after the absence.