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Course Information Course Selection 2015-16

List of Courses

- Religion
- English
- Science
- Math
- Social Studies
- Business/Technology
- World Languages
- Art and Photography
- Music
- Physical Education

Religion Courses 2015-16

- Religion 1 (CP1)
- Religion 2 (CP1)
- Religion 3 (CP1)
- Humanities (HON)- recommended to be paired with AP Language and Composition (seniors only) OR
- Christian Lifestyles/Catholicism and the Arts: (seniors only) OR
- Christian Lifestyles/Catholicism and Current Events- Seniors only (semester)



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HUMANITIES (Honors)

RE404

Humanities

Course Information:

1. Religion
2. Full Year
3. Seniors
4. Recommended with AP English
5. No prerequisites



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Humanities

- Is a journey of Philosophy and Spirituality
- Critical examination and of past and present works
- Study Classical Philosophy and Literature combined with modern compositions
- Core of study is teaching of Christ and the Catholic Church
- Books read include *Inherit the Wind*, *Screwtape Letters*, *Legend of Bagger Vance*, *Man's Inhumanities to Man*, *The Prince* and *The Book of Job*



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Humanities

Main objective of the course is to develop critical thinking skills and to examine your relationship with God.

Will also study basic arguments for the existence of God



Humanities

Academic Requirements:

1. All essays
2. Several projects
3. Three field trips to see plays at local playhouses
4. Class Participation



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Humanities

- Students will improve critical thinking skills and new ways at looking at life.



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Christian Lifestyles & Catholicism/Arts

RE411

Catholicism and the Arts

Course Information:

1. Religion Department
2. Senior
3. Any one
4. No Pre-requisites



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Catholicism and Arts

Students will:

1. Examine Catholic Faith through works, of art, film and literature
2. Examine the impact of words on our conscience thought and relate them to faith and liturgies
3. Be challenged to think critically about the human element of their faith as depicted to art during different time periods
4. Explore how art can lead to prayerful experiences



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Catholicism and Arts

Course Description: This semester course will be a historical study of Catholicism as seen through art, music, film and literature. Various themes will be emphasized through readings, film, and guest speakers.



Catholicism and Arts

Academic Requirements:

1. All essays and projects (about 8-10 papers quarter and 1-2 projects)
2. No Tests
3. No Pre-requisites
4. Open to any senior



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Catholicism and Arts

- This course gives the student a different way to view his faith
- It challenges the student to think critically about his faith and value system



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Christian Lifestyles & Catholicism/Current Events

RE401

Catholicism and Current Events

Course Information:

1. Religion Department
2. Senior Year
3. All Seniors
4. No Pre-requisites



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Catholicism and Current Events

Course Objectives: Students will:

- Students will use current events to explore their Catholic Faith.
- Students will understand the beliefs of the Catholic Faith and apply them to current issues
- Students will understand the living of their beliefs as reflected to real life experiences



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Catholicism and Current Events

Course Description:

- Using current events, this class will look at Church teachings and challenges facing Catholics in today's world. Newspapers, magazines, and Church teachings will be the main sources. Guest speakers will also be a main part of the class.



Catholicism and Current events

Academic Requirements:

1. All Essays (8-10 per quarter)
2. 1-2 projects
3. Readings from newspapers and internet
4. Use of Syndicated Columnists
5. Documentaries



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Catholicism and Current Events

- Students will be able to use currents to critical think about the world they live in and how their faith relates to such events
- It is another different option for students to explore the Catholic Faith and how it relates to everyday living.



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English Courses 2015-16

- **AP English Literature and Composition for Juniors**
- **AP English Language and Composition for Seniors**
- **Journalism and Media Studies**
- **Yearbook 1,2,3**



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AP English Literature and Composition for Juniors

Mr. Michael Rose

AP LITERATURE AND COMPOSITION: EN304

Course Information:

1. Please refer to the website created for the course for any and all information in making your decision.
2. <http://moellerlit.weebly.com/>



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Journalism and Media Studies

EN441/EN443/EN453

Mr. Michael Rose

JOURNALISM AND MEDIA STUDIES

Course Information:

1. Please refer to the website created for the course to receive any and all information.
2. This is a course for Juniors and Seniors
3. <http://moeller-journalism.weebly.com/>



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Science Courses 2015-16

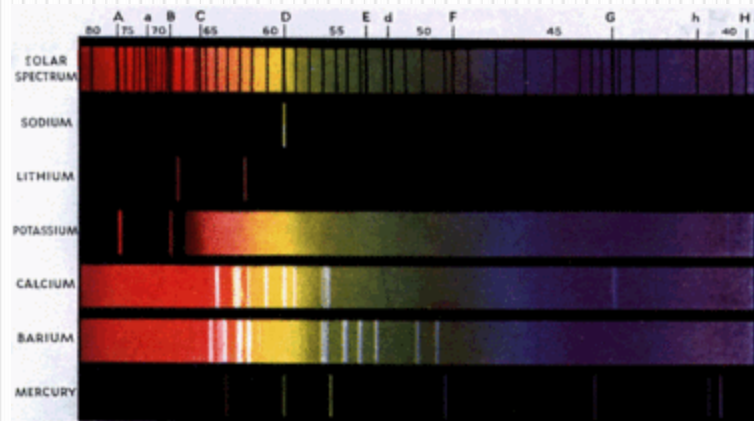
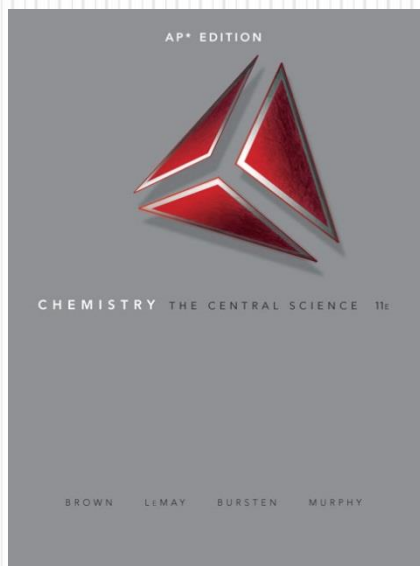
- AP Chemistry (SC304)
- Honors Organic Chemistry (SC333)
- AP Environmental Science (SC214)
- AP Biology (SC414)
- AP Physics (SC314)
- Physical Science CP2- sophomores (SC202)
- Human Anatomy and Physiology CP1 (SC321)
- Earth Science CP2- seniors (SC422)
- Engineering 1,2,3,4 HON (SC343/353/443/453)
- Engineering Models 1 -Matlab HON (SC463)



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SC304 AP Chemistry

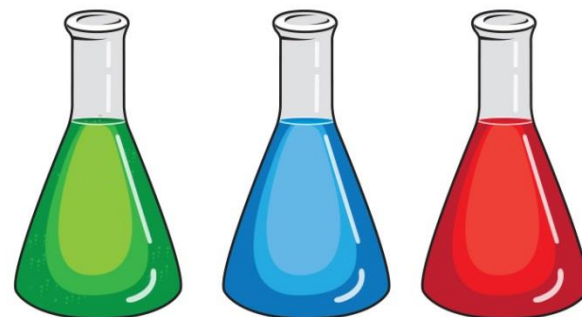
Mr. Kevin Conlon



AP Chemistry

Course Information:

1. Science Department
2. Year long course
3. Junior's only
4. Students who are currently enrolled in honors math & received a 75% on the pre-AP chemistry test.
5. Pre-requisites:
 1. Approval from biology teacher & honors math teacher
 2. **Successful completion of summer preparation project.**
Students will learn chapters 1 & 2 and then take a pre-AP chemistry test before the school year begins.



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AP Chemistry

- **AP Course**: Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.
- **M-block Requirement**: Students who take AP chemistry have to stay for all M-blocks until the AP chemistry exam in May.



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Periodic Table of the Elements © www.elementsdatabase.com

hydrogen		poor metals	
alkali metals		nonmetals	
alkali earth metals		noble gases	
transition metals		rare earth metals	

1	2											10	11				
H	He											Ne	Ar				
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
Li	Be	B	C	N	O	F	Ne	Na	Mg	Al	Si	P	S	Cl	Ar		
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
55	56	57	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
87	88	89	104	105	106	107	108	109	110								
Fr	Ra	Ac	Unq	Unp	Unh	Uns	Uno	Une	Unn								
58	59	60	61	62	63	64	65	66	67	68	69	70	71				
Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu				
90	91	92	93	94	95	96	97	98	99	100	101	102	103				
Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr				

AP Chemistry



Course Description:

AP Chemistry is a study of the fundamental chemical concepts that would be presented in a typical college chemistry course. Material covered will include the modern view of atoms, stoichiometric relationships, modern atomic theory, chemical equations, periodicity, solutions, gases, liquids, and solids, thermochemistry, chemical bonding, chemical kinetics, chemical equilibrium, acid-base theory, and oxidation and reduction.

Students will use some inquiry in the lab to develop a better understanding of the concepts covered in class. Students will learn general topics through the use of POGIL (Process Oriented Guided Inquiry Learning). Students will watch MoeTube video's at home to help them learn chemistry concepts and in class will review these concepts, learn more concepts, work on problems and learn through the lab.



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AP Chemistry



Academic Requirements:

1. Students will spend 1 hour a night working on homework.
2. At least 16 labs will be completed.
3. Students should read each section of the book covered in class & watch MoeTube video's.
4. Spending around 7 hours a week studying is the time required to be successful in AP chemistry.



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AP Chemistry

- Why should the student take this course??
- AP Chemistry is the equivalent of a first year college level chemistry course. This course will be challenging, but will be a solid preparation for college. If a student is looking to major in science in college or knows he will take a general chemistry course in college or wants to challenge himself he should take this class.
- What will the student gain from the course??
- Students will see very little new content (if any) in a college level general chemistry course after having taken this class. Students will develop study skills to be successful in college.



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AP Chemistry



- Summer Preparation
- The summer preparation project will be given to students the week of sophomore exams in May.
- Students will watch MoeTube videos, read the book and complete problems in preparation for taking AP chemistry.
- Students will learn chapters 1 and 2 from Brown-Lemay 11th edition.
- Summer topics include: Classification of matter, properties of matter, dimensional analysis, significant figures, density, the atom, the periodic table, compound nomenclature & formula writing.



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AP Chemistry



- Summer Preparation
- 1 or 2 dates will be announced in May which students can come to school to ask questions regarding the summer project (possibly the end of July & the beginning of August).
- A date will be set in May when the pre-AP chemistry test will be administered (probably the first week of August – students who cannot make this date can schedule an alternate date).
- Students must score a 75% on the test to enter AP chemistry. If a student does not score this then he can take an alternate test before the school year begins to try to earn a 75%.
- Once a student is in AP chemistry, drops to CP1 are not allowed.



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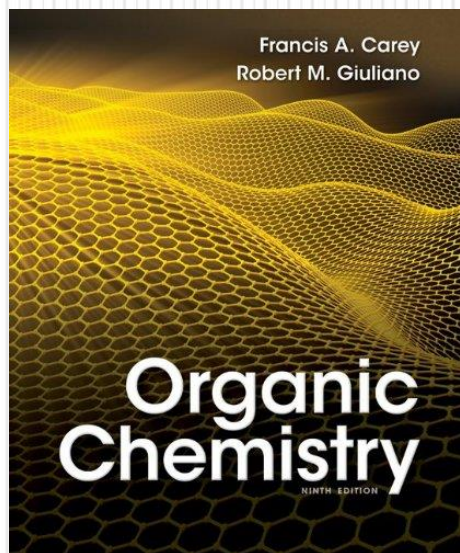


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SC333

Honors Organic Chemistry

Mr. Kevin Conlon



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Mechanism 4.3

Free-Radical Chlorination of Methane

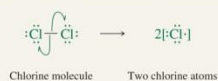
THE OVERALL REACTION:



THE MECHANISM:

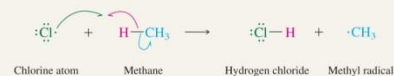
(a) Initiation

Step 1: Dissociation of a chlorine molecule into two chlorine atoms:



(b) Chain propagation

Step 2: Hydrogen atom abstraction from methane by a chlorine atom:



Step 3: Reaction of methyl radical with molecular chlorine:



Steps 2 and 3 then repeat many times.

Organic Chemistry

Course Information:

1. Science Department
2. Year Long Course
3. Seniors
4. Students who have completed CP1 or AP Chemistry
5. Pre-requisites for the course
 1. Received at least a “B” average in CP1 chemistry or a “C” average in AP chemistry
 2. Recommendation by your chemistry teacher
6. Final acceptance is provided by Mr. Conlon.



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Organic Chemistry

Course Description:

Honors Organic Chemistry provides a highly theoretical course that covers one third to one half of a typical college organic chemistry course. Topics covered include alkanes, alkenes, alkynes, cyclic hydrocarbons, chirality & nucleophilic substitution. Special emphasis is placed on reaction mechanisms. Students will participate in lab experiments during the year. The course is designed for those students who are planning to major in medicine, any pure science, pre-dental, or any track that will require organic chemistry in college.



Organic Chemistry

Academic Requirements:

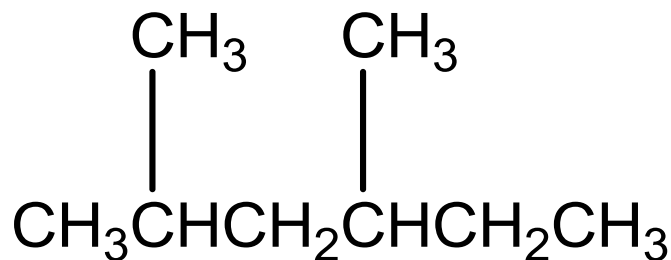
1. Expect to spend at least 30 minutes on homework (some class time will be provided to work on homework).
2. There will be one lab/project for each chapter covered in the textbook.
3. Reading the section or sections covered in class is recommended (20-30 minutes)
4. Students should expect to study for at least 3 hours a week to be successful in organic chemistry.



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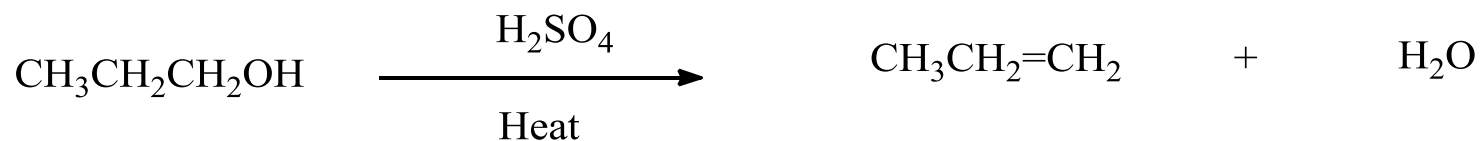
Organic Chemistry

- Additional material on the course:
- One topic discussed in organic chemistry is compound nomenclature. For example the name of the compound below is 2,4-dimethylhexane. Why – because at the 2nd and 4th carbon there is a methyl group (di- because there are 2 of them) and the end part of the name is hexane because the longest chain is a hexane (6 carbon group).



Organic Chemistry

- Additional material on the course:
- Another one of the areas discussed in organic chemistry is reactions. For example, the reaction below is the dehydration of an alcohol. Notice an alcohol molecule (a hydrocarbon with –OH attached to it) is reacted with sulfuric acid and heat. What is produced is a double bonded structure (called an alkene) and water.



Organic Chemistry

- Why should the student take this course??
- Organic chemistry is the “weed out” course for students who want to major in medicine, pharmacy or science. Organic chemistry is taken sophomore year of college – it moves very fast in college and is packed with content.
- What will the student gain from the course??
- Students will have learned 1/3 to 1/2 of what is covered in a college level organic class. This course provides you a foundation to help you be successful at the college level.



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AP ENVIRONMENTAL SCIENCE SC214

Mr. Dan Shannon

AP ENVIRONMENTAL SCIENCE

Course Information:

APES is an Advanced Placement Science Elective offered to **sophomores or juniors** as a full year course.

To be eligible for this class, students must have scored:

a. 85% or higher in Honors Biology or permission of the instructor

Or

b. 90% or higher in CPI Biology or permission of the instructor

Signing Up for this course **requires** you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course



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AP ENVIRONMENTAL SCIENCE

Major Topics of Study:

Ecology

Population Issues

Water Issues

Toxicity, Pesticides, and Agriculture

Atmospheric Issues

Resources and Energy

Biodiversity, Politics, and Economics



AP ENVIRONMENTAL SCIENCE

AP Environmental Science is an intensive examination of our environment, and analysis of the threats posed to it by the attitudes of individuals, societies, economics, and politics, and a clear look at the solutions employed to dispel these threats.

This course is taught in both the project based and seminar method, with multiple presenters and multiple points of view. Student creativity, thoughtfulness, and logic is our ultimate goal as we work to understand the complexities of the problems we face.



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AP ENVIRONMENTAL SCIENCE

Academic Requirements:

1. There will be homework every night.
2. Students regularly collaborate (or work independently) on projects
3. We use a textbook as well as outside readings to embellish the ideas learned in class.
4. We usually have a field trip once a quarter.



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AP ENVIRONMENTAL SCIENCE

After having taken the APES course, a student has the preparation to enter a variety of arenas of study.

Law, Politics, and International Studies

Engineering , Architecture and Design

Business

Medicine and Biological Sciences

Meteorology and Climate Studies

Energy, Resource Management, and Geology

Sociology and Research



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AP ENVIRONMENTAL SCIENCE



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AP BIOLOGY

SC414

Mr. Dan Shannon

AP BIOLOGY

Course Information:

1. AP Biology is a senior elective in the science department designed for students who plan to major in a scientific field in college. Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.
2. Pre-requisite Class:
 1. AP Chemistry – 80% First Semester Average or permission of instructor
 2. CPI Chem – 90% First Semester Average or permission of instructor



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AP BIOLOGY

Course Description:

- Major Topics
 - Biochemistry, Statistics, and Laboratory Techniques
 - Cells and Cell Processes
 - Genetics - Mendelian and Molecular
 - Population Genetics and Evolution
 - Anatomy and Physiology
 - Ecology



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AP BIOLOGY

Course Description:

The AP Biology curriculum I teach is diverse and kinesthetic, but it's fast-paced and requires in-depth coverage of the material so that the students receive a university-quality biology education. Bringing in Guest Speakers or attending conferences helps us to be as current and relevant in the modern field of biology as possible as well as providing information about career paths. Students who complete Advanced Placement Biology typically (but, not limited to) major in Biology, Biochemistry, Genetics, Medicine, Pharmacy, or Bio-Engineering.



AP BIOLOGY

Academic Requirements:

Homework assignments range from reading the textbook in preparation for class to collaborative projects to be presented during class.

There are eight formal labs required by College Board, however our class is structured around the activity or the model that best explains the topic. We perform a lot of informal labs from which we learn a great deal.



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AP BIOLOGY



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AP Physics 1

Mike Ward

AP Physics 1

Course Information:

1. Science
2. Year long
3. AP
4. Seniors (juniors with approval)
5. **Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.**



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AP Physics 1

The benefits of this course include:

- Students will grow in their ability to work diligently and consistently in a rigorous mathematical environment.
- Students will grow in their ability to synthesize abstract mathematical and physical concepts and then apply them to familiar as well as unfamiliar problems.
- Students will grow in their ability to think logically.
- Students will grow in their ability to solve multi-step, open-ended and word problems.
- Students will grow in their ability to design, conduct and interpret the results of experiments



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AP Physics 1

Course Description:

AP Physics 1 is an algebra-based course in general physics. General physics topics presented during the course closely follow those outlined by the College Board and also mirrors an introductory level university physics course.

AP Physics 1 is organized around six big ideas that bring together the fundamental science principles and theories of general physics. These big ideas are intended to encourage students to think about physics concepts as interconnected pieces of a puzzle. The solution to the puzzle is how the real world around them actually works. The students will participate in inquiry-based explorations of these topics to gain a more conceptual understanding of these physics concepts. Students will spend less of their time in traditional formula-based learning and more of their effort will be directed to developing critical thinking and reasoning skills.



AP Physics 1

Academic Requirements:

1. Students can generally expect 40-60 minutes of homework per night
2. Students will complete approximately 4 labs per quarter, some of which will include formal lab write-ups.
3. Students are expected to read sections of the textbook as material is presented, and outside reading may be beneficial at times in aiding understanding of more difficult topics.
4. It is not uncommon that a student may spend 6-8 hours per week on preparing for/completing assignments and lab work in this class in order to be successful.



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AP Physics 1

- In addition to rigorous mathematical analysis, students will conduct several labs each quarter. Labs are “hands-on” and placed throughout the instructional year. Students will spend at least 25% of total class time in laboratory investigations.
- Labs can be either teacher directed or student directed/open-ended. During a teacher-directed lab, the students are given instruction on the operation of lab equipment and guidance in the process of the experiment. Student-directed labs are when the students are given an objective, e.g. “Determine the acceleration due to gravity on Earth,” and standard materials needed to conduct a lab. Students are allowed to create their own experimental design and collect data, which can be analyzed through graphical methods.
- These inquiry-based investigations or student-directed labs have an extra element added to the lab report. After these labs, each student group must present their results to the class and defend their results. They will also evaluate one other group's approach to the problem and offer a critique of their procedures and results.



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AP Physics 1

- Students work in lab groups, but each student must submit a lab report which is turned in the day after the conclusion of each activity, then graded and returned. The report must include the following components:
 - Statement of the problem
 - Hypothesis
 - Discussion or outline of how the procedure will be carried out
 - Data collected from the experiment
 - Data analysis
 - Conclusion including error analysis
 - Peer review (if included in this lab)



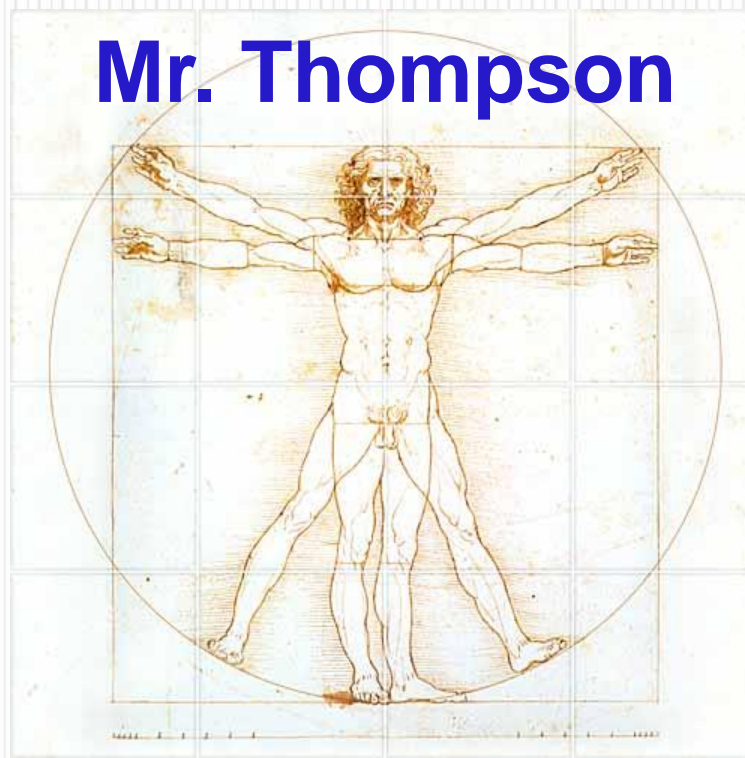
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Anatomy and Physiology CP1 SC321

Mr. Thompson



Anatomy and Physiology

Course Information:

1. Department: Science
2. 1 credit, year-long course
3. Level: CP1
4. Eligibility: Sophomores, Juniors, Seniors
5. Pre-requisites
 1. All students must have taken Biology (HON) or averaged greater than an 80 in Biology CP1.
 2. Seniors must also be enrolled in Physics, or already have a Physics credit.



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Anatomy and Physiology

Course Description: The Anatomy and Physiology course takes a systems approach towards the study of the structure and function of the human. Students will explore the developmental aspects and homeostatic imbalances when studying each system. Particular emphasis is placed on laboratory skills, reading skills, collaboration with peers, and frequent study assignments.



Anatomy and Physiology

Course Content:

- The Body – An Orientation
- Biochemistry
- Cells and Tissues
- Integumentary System
- Skeletal System
- Muscular System
- Nervous System and Special Senses
- Endocrine System
- Blood
- Cardiovascular System
- Lymphatic System and Body Defenses
- Respiratory System
- Digestive System
- Urinary System
- Reproductive System



Anatomy and Physiology

Academic Requirements:

1. Typical amount of homework/reading per night:
20-30 minutes
2. One major project per semester
3. Multiple labs/dissections per quarter



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Anatomy and Physiology

Goals:

- The student will be able to identify the major systems of the human body.
- The student will identify the organs of each system and locate them in his body
- The student will describe the function of individual organs, tissues and cells within an individual system.
- The student will be able to describe the regulatory processes that govern the action of individual systems, organs, tissues, and cells.
- The student will research novel diseases or imbalances and explain not only the mechanism behind the imbalance but the strategies used to treat or cure the imbalance.



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Engineering 1, 2, 3 & 4

Four one semester courses for juniors and seniors.

SC343, SC353, SC443, SC453

Instructor-Russ Pinkerton

Engineering 1, 2, 3, &4

Course Information:

1. Engineering 1-4 are preparatory classes to help students be prepared for majors in engineering at college. The classes are listed as science classes at Moeller.
2. Engineering 1 is fall course for juniors and seniors and they may continue with Engineering 2. Juniors who complete Engineering 1 & 2, may take 3 & 4 as seniors.
3. All 4 classes are Honors level courses-Engineering 1 is a dual credit and may receive college credit
4. Students who are progressing to take pre-calculus or higher as seniors are eligible for Engineering 1.



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Engineering 1

- Comments on Dual Credit-during the past two years many students at Moeller choose to pay a \$220 fee get two semester hours of University of Cincinnati college credit from Engineering 1. They did not have to complete anything extra to get the credit. The credit is transferrable to all Ohio state schools (and most private schools).
- The Engineering Models I-Matlab is a programming open to students that are juniors or seniors that want to pursue engineering-it is also dual credit.



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Engineering 1, 2, 3, &4

Course Description: Engineering 1-4 are courses designed to help students learn about how engineers solve problems (the design process) and to help them learn about engineering careers and engineering fundamentals.

Students complete a large number of group projects ranging from building cardboard chair to design bridges or other projects.



Engineering 1, 2, 3, & 4

Academic Requirements:

1. A major focus of the class is methodical problem solving and the design process.
2. Students learn about different engineering disciplines and complete projects in various disciplines.
3. Students do project work in groups in class
4. About 1-2 major projects per quarter
5. Homework overall is about 2-4 hours per week.



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Engineering 1, 2, 3, & 4

- Engineering students at college have Calculus as their first math class so it is important that students work as hard as possible and learn as much as possible to make a smooth transition to college. Students need to be progressing take pre-calculus during their senior year in order to qualify for Engineering 1-4. Seniors need to be taking Physics or AP Physics to qualify for Engineering 1-4.



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Engineering Models 1- Matlab SC463

Instructor-Russ Pinkerton

Engineering Models 1-Matlab

Course Information:

1. Engineering Models 1-Matlab is year long, 2 semester credit hour programming course to prepare students for engineering. Students at most colleges are required to take an introductory Matlab course and this course is targeted for that purpose.
2. Engineering Models 1-Matlab is targeted for juniors and seniors who are planning on majoring in engineering.
3. Engineering Models 1-Matlab is a dual credit and students can receive UC credit for the course
4. Students who are progressing to take pre-calculus or higher as seniors are eligible for Engineering Models.



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Engineering Models 1-Matlab

- Comments on Dual Credit-during the past year many students at Moeller choose to pay a \$220 fee get two semester hours of University of Cincinnati college credit from Engineering Models 1-Matlab. They did not have to complete anything extra to get the credit. The credit is transferrable to all Ohio state schools (and most private schools).
- Engineering 1 is also a dual credit at the University of Cincinnati.



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Engineering Models 1-Matlab

Course Description: Matlab is a software that is used by engineers both at college and in engineering practice. At Moeller we follow the introductory Matlab course from the University of Cincinnati. Our assignments, quizzes are similar to those at the University of Cincinnati.



Engineering Models 1-Matlab

Academic Requirements:

1. The main focus of Matlab is to solve engineering and mathematical problems.
2. Students work on homework and projects on their own and we meet in class to review progress. Lab activities involving Matlab are also completed.
3. Students need to do 2-4 hours of work on homework outside of class. This class has much more homework than Engineering 1-4.



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Engineering Models 1-Matlab

- Engineering students at college have Calculus as their first math class so it is important that students work as hard as possible and learn as much as possible to make a smooth transition to college. Students need to be progressing take pre-calculus during their senior year in order to qualify for Engineering 1-4. Seniors need to be taking Physics or AP Physics to qualify for Engineering 1-4.



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Engineering Models 1-Matlab

- The link below will show you a brief video about Engineering Models 1-Matlab.



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Math Courses 2015-16

- **Computer Science 1 and 2**
- **AP Statistics**
- **AP Calculus**
- **CP1 Calculus**



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COMPUTER SCIENCE 1,2

MA323-0, MA333-0

**On-Line Course
Facilitator: Mr. Gaier**

Computer Science 1,2

Course Information:

1. Department: Math / Technology
2. Semester Course, ½ Credit
3. Level: Honors
4. Grade Level: 10, 11, 12
5. Pre-requisites: Math grade > 85
6. Geared towards students interested in a career in IT
7. Approval from Mr. Gaier or math teacher



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Computer Science (online)

- Course is geared to students who have an interest in a career in IT or Computer Science
- Course will be 'online' through Moeller's online course provider
- Students will be placed in a study period where a Moeller online facilitator will work with the student and the online course provider



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Computer Science (online)

Academic Requirements:

1. In addition to scheduled class time, students should expect 1 additional hour of work per scheduled class
2. Students should be strong in Math. Must have a minimum of 85 in current math class.
3. Students should be able to work independently.



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Computer Science (online)

QUESTIONS ABOUT THE COURSE?

Contact Mr. Gaier (jgaier@moeller.org) or stop by the Technology Center.



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AP STATISTICS

MA454

AP STATISTICS

Course Information:

1. Mathematics
2. Year Long
3. AP Course
4. Juniors and Seniors
5. Pre-requisites
 1. 85% average in CP Algebra II and Trig



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AP STATISTICS

- AP Course: Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.



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AP STATISTICS

Probability and Statistics is designed to be an elective mathematics course for juniors and seniors. Probability and Statistics is divided into four major parts: Descriptive Statistics: Concepts and Methods which comprise an introduction to Statistics, methods of displaying data, frequency distributions, measures of central tendency and dispersion, and describing individual performances; Probability, which studies elementary probability and probability distributions; Inferential Statistical Concepts, which covers applied sampling, estimation and hypothesis testing; and Inferential Statistical Methodology, which looks at correlation, regression analysis, the t-test, analysis of variance and the Chi-Square Test.



AP STATISTICS

Academic Requirements:

1. An hour of Homework per night.
2. 1 Major Project with many small labs
3. Reading Required
4. Minimum 4 hours per week spent working on Statistics



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AP Statistics

- Students should take this course because statistics is a course that many Colleges require throughout many fields of study.
- If students take the AP Statistics now, not only do they receive college credit if they pass the AP test but they also will be more prepared than the other students when they are in their College Statistics Classes.



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AP Calculus BC

MA434

Mr. Kohls

AP Calculus BC

Course Information:

1. Mathematics Department
2. Year long course
3. Senior level course
4. Pre-requisite – 85% in Honors Analysis
5. In order to receive AP weight for class rank, you must register and take the AP test in the spring. Otherwise, you will receive only Honors weight for class rank.



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AP Calculus BC

The College Board offers two different AP courses/tests.

1. The “AB” course is equivalent to just first semester college calculus.
2. The “BC” course is equivalent to first and second semester college calculus. This test will also provide an AB sub-score based off your performance on the common questions that are on both the AB and BC test.

We only offer the “BC” course for our students.



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AP Calculus BC

Course Description:

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations.

- Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.



AP Calculus BC

Academic Requirements:

1. Typically 60-90 minutes of homework per class period
2. No papers/major projects
3. Reading the text for further support is recommended.
4. 3-4 tests per quarter.
5. Approximately 3-5 hours outside of class time would be expected per week for the student to be successful.



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AP Calculus BC

- This course requires strong algebra skills and mastery of geometry and trigonometry concepts from previous courses. While some review of such concepts will occur during the course, time spent reviewing will be minimal.
- Students who wish to pursue a career related to mathematics, science, engineering, or medicine should take this course.



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Social Studies Courses 2015-16

- US History AP
- AP World History
- AP Psychology
- AP Government
- Classical Age
- Cincinnati History
- First Amendment (ONLINE) Honors and CP1
- History of WWII (Online)
- Civil War



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AP US History

SO414

Instructor-Mr. Faller

AP US History

- Social Studies
- Year long 1 Credit
- US History (required for graduation)
- Advanced Placement level (AP)
- Sophomore year
- Open to all students who are in “Honors” level English with a “B” average or higher, or have a recommendation from their current English teacher and talk with Mr. Faller.

AP US History

- This course is an AP level course. In order to receive full AP credit for class rank and College consideration the national AP exam must be taken in the spring. There is an outside fee required for test registration. Any student who opts out of the AP exam course credit will be lowered to the “Honors” level.

AP US History

- **I. Course Description:**

- This course covers the domestic and diplomatic history of the United States from the pre-Columbian period to the present. The course is designed to provide a college-level experience and preparation for the AP exam in May. The student will be acquainted with the social, cultural, political, intellectual, religious, and economic developments in the United States and the relationship of these developments to international relations. Included in this course are geographical applications and Ohio history. An emphasis is placed on interpreting documents, both primary and secondary history sources will be examined, mastering a significant body of factual information, and writing critical essays. The students will be exposed to various styles of history writing and research, and the students are expected to do multiple research projects, including a thesis paper utilizing the MLA methodology. Extensive essay writing is a critical component to this course. Students taking this course are encouraged to take the AP Examination. The course is weighted; those who chose to take the AP exam get AP weighted credit and those who do not receive Honors weighted credit. Classes meet every other day for 90 minutes in a standard A/B block schedule.

AP US History

- Academic requirements:
- This course has a heavy emphasis on reading and essay writing. A strong foundation in English abilities is recommended.
- Homework assignments are typically due at the beginning of the last class meeting of the week.
- Weekly homework typically consists of multiple essay style questions with research. Estimated time is 5-8 hours.
- In addition frequent outside reading assignments are common with time estimates depending on reading speed averaged at 2-4 hours per week.
- Most assignments are posted for the quarter with students encouraged to work ahead.
- Effective time-management skills are essential to success.

AP US History

- Who should take this course? The top level academically minded student should take this course. While it is a significant amount of work the rewards are also significant: increased class rank, higher academic prestige, a much more attractive college application resume, opportunities to earn college credits via AP exams, and increased college level skill development as preparation for the next level of academic challenges.



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AP World History

S0304

Mr. Naumann

AP World History

Course Information:

1. History/Social Studies
2. The course is year long
3. AP (Advanced Placement)... College credit is available for students that perform well on the AP test
4. Students who have taken US History are eligible (it may be helpful to have taken AP US History, but it is not a prerequisite)
5. It is a natural progression from AP US History to AP World History (no signature is required)... If you are moving up from CPI US History to AP World History please see Mr. Naumann for approval



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Course Description

- The purpose of the AP World History course is to develop a greater understanding of the evolution of the global processes and contacts in different types of human societies. This understanding is advanced through a combination of selective factual knowledge and appropriate analytical skills. The course highlights the natures of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study. Our identity as a Catholic school will also serve to challenge students to examine history as it uniquely relates to the faith.



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Course Expectations

- There is approximately 60 minutes of homework for every 90 minutes of classwork. Assignments may vary, but there is homework on a regular basis.
- The three most basic skills necessary for success in the course are... Reading, Writing, and Critical Thinking. There are numerous opportunities to develop all three of these skills. Reading and Writing are critical to both homework assignments and tests.
- There is a research paper that is required. This is the single most important assignment of the year.



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Course Expectations

- There are typically two/three tests per quarter and quizzes on a bi-weekly basis.
- The AP Test is a significant aspect of the course experience, but the test is not the driving force for the course. The course is designed to strengthen academic skills and therefore prepares the students for taking the test as a part of that process.
- Registering for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.



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Why is AP World History the right course for you?

- AP World History is a great class! It will challenge you to grow academically and as a young man. You will be challenged academically, your understanding of the world you live in will grow, and your faith will be strengthened.
- This course is appropriate for any student that has a desire to stretch themselves... It will take some hard work, but it is well worth it.
- See Mr. Naumann if you have any questions



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AP Psychology

SO 434

Michael Shaffer

AP Psychology

Course Information:

1. AP Psychology is a year-long, Social Studies course for juniors and seniors
2. All juniors and seniors who are interested should apply, but space is limited to around 100 students
3. If more than 120 students apply, students will be selected in the following order:
 1. AP/Honor Level Seniors
 2. AP/Honor Level Juniors
 3. CP1 Seniors
 4. CP 1 Juniors
 5. CP 2 Seniors



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AP Psychology

- Since this is an AP Course: Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.
- In the past three years, a total of 259 students have taken the AP Psychology exam and have earned an average score of 3.24 and 70% passing the test.



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AP Psychology

Course Description: AP Psychology explores the different ways that people think, behave, and learn. We explore why people do bad things, how to effectively change behavior through rewards and punishments, and the best ways to treat mental illness. It is an excellent class for anyone who wants to understand human behavior better.



AP Psychology

Academic Requirements:

1. There is approximately 30-60 minutes of homework per night.
2. There is typically a project in the first semester where students perform their own psychology experiment.
3. There is a quiz or test to start each class.



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AP Psychology

- Why you should take AP Psychology:
 - It is a fun, interesting course that deepens your understanding of why people think and act the way they do.
 - Most students who take the course earn college credit through the AP exam.
 - For those of you who have never taken an AP class, this is a good place to start.



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AP US Government and Politics

SO424

(The AP course for all students)

Mr. Robert Tull

AP US Government and Politics

Social Studies

Year long class

AP

Juniors and Seniors are eligible

Approval is needed: if you have been taking AP/Honors classes in Social Studies or have an average of 80 or above in CPI Social Studies classes you will qualify. Even if you have never taken an AP class you are encouraged to enroll in this course.



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AP US Government and Politics

AP Course: Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.



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AP US Government and Politics

Course Description: U.S. Government and Politics is a yearlong study of the American Governmental systems with emphasis on the Constitution, its roots and relationships, governmental structure at all levels of government and the political process. This course is also a study of the more important political issues, which face our nation today. Discussion and analysis of these issues will constitute an integral segment of the course. The course will cover the AP curriculum and it is assumed that the students are planning on taking the AP U.S. Government and Politics exam in the second semester.



Course Name

Academic Requirements:

1. The AP textbook has 19 chapters that will be read and there will be a quiz on each chapter.
2. There will be a 2nd semester term paper (8-10 pages)
3. Every unit will have several articles to read.
4. Most units will have MoeTube videos that will be required viewing.
5. 2-3 projects per quarter (ppt, short papers)



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AP US Government and Politics

As stated earlier, you are encouraged to take this AP courses even if you have not been a “traditional” AP student. Show the colleges that you are willing to take on a college level course. Show yourself that you are ready for college by taking on a college level course.

If you have an interest in US government and are willing to work this class will work for you.



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First Amendment online

CPI (SO441) or Honors (SO443)

Mr. Robert Tull

First Amendment online

Course Information:

1. Social Studies
2. One semester/1/2 credit course
3. CPI or Honors level
4. Sophomores/Juniors/Seniors
5. No prerequisites
6. No application process



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First Amendment

Course Description: This course will focus on the phrases of the 1st amendment (freedom of religion, press, speech, assembly and petition). The historical background would be studied emphasizing the major cultural transitions that have affected the 1st Amendment as well as many of the precedent changing cases the courts have dealt with. Much of the course work will deal with current events involving the 1st amendment at the national and local levels. This would be a CPI or Honors level class with up to 20 students. The course will be a ½ credit course that will run during the first or second semester.



First Amendment online

Readings will be selected and distributed to the students in either hard-copy or digital format. Reflections and/or quizzes will be required as well as participation in on-line discussions. Student research projects will be required which will include at least one research paper. Moe-Tube or on-line videos will be required viewing with reflections or quizzes to follow. Occasional meetings (2-3 per quarter) will be scheduled as needed for both discussions and/or tests.



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More on class assignments: CPI level

2-3 videos per quarter (reflection or quiz after viewing)

2-3 articles per quarter (reflection or quiz after reading)

Weekly blogging about current events

Quarterly projects based on 1st or 2nd semester:

1st or 3rd quarter: Current events paper (3-4 pages) and Powerpoint presentation on topic (at least 15 slides)

2nd or 4th quarter: Paper or powerpoint on topic and Research paper (6-8 pages)

(Topics on projects will be student's choice in consultation with the teacher.)

More on class assignments: Honors level

3-4 videos per quarter (reflection or quiz after viewing)

3-4 articles per quarter (reflection or quiz after reading)

Weekly blogging about current events

Quarterly projects based on 1st or 2nd semester:

1st or 3rd quarter: Current events paper (4-5 pages) and Powerpoint presentation on topic (at least 20 slides)

2nd or 4th quarter: Paper or powerpoint on topic and Research paper (8-10 pages)

(Topics on projects will be student's choice in consultation with the teacher.)

First Amendment online

Much of the course work will be customized to fit the interests of the students.

A survey of the 1st amendment will be required but most of the projects (and research paper) will be topics chosen by the student.

So what are your interests:

Freedom of Religion? Speech? Press?

Right to Assemble? Right to petition?

See Mr. Tull in rm. 333 if you have any questions or email: Btull@Moeller.org



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History of World War II online

SO413

Mr. Faller

History of World War II online

Course information:

Social Studies Department

Elective offering

1/2 credit

Honors level

Yearlong

Seniors and Juniors only

Must have taken US History

Instructor permission required. All perspective students need to meet with Mr. Faller.

History of World War II online

I. Course Description: This course is a 1/2 credit year long on-line offering. It will look at WWII from a world perspective. The course will focus on the war itself from German, British, French, Russian and American participants and histories.

Selective readings will be provided to the students via the Moeller X drive and then reading questions answered and discussed via on line discussions. Occasional meetings will be scheduled as needed. The student is required to complete all readings and participate in discussions. A quarterly research paper is required. The course is open to any Junior or Senior student who has completed US History.

History of World War II online

Academic Requirements:

- 1. Weekly readings of 20-65 pages.**
- 2. Written responses to questions typically 4-8 paragraphs.**
- 3. Quarterly 10-15 page research papers using MLA format. Fully cited with maps, charts and pictures.**
- 4. Participation in discussion blogs.**
- 5. Summer reading with quiz in the fall.**
- 6. Weekly time requirement depends on reading speed, but typically 2-5 hours per week.**

History of World War II online

Course info:

This course is designed for the serious WWII enthusiast. It is a military examination of the war with limited economic, political and social examinations. Equal focus will be given to the study of the different theaters of war including European, Mediterranean, Eastern Front and Pacific theaters. The readings are a variety of first person accounts and traditional historical accounts.

The quarterly term papers are theme based. Quarter 1 is early WWII 1939-1941, Quarter 2 is Russian front, 3rd quarter is Pacific Theater, and 4th quarter is late war Europe 1943-1944.

The structure of the term paper is 1/3 is a report on a battle, 1/3 is a report on a leader who was in the battle and 1/3 is a report on a weapon system used in the battle. Typical length is 12 pages plus citations and illustrations.

When possible we take a 4th quarter field trip to a shooting range and fire WWII firearms and meet with WWII veterans.

American Civil War

SO391 / SO392

Mr. Faller

Civil War Elective

- 1. Social Studies
- 2. 1 semester ½ credit course
- 3. CPI and CPII
- 4. Open to Sophomores, Juniors and Seniors
- 5. Must have had, or are currently taking US History.

Civil War Elective

- This is a 1 semester, ½ credit elective CPI or CPII course offering. This course will take a comprehensive look at the Civil War from the causes and politics of the war to the strategies, leaders, weapons, tactics and battles, to the Reconstruction era after the war. Most of the course is devoted to a military history of the war. Several outside readings will be assigned and 4 research style “battle reports” are required per quarter.

Civil War Elective

- Homework is assigned weekly and is typically due the last class period of the week. Since there is no text book we read 2 soldier's journals. Weekly homework consists of reading 1-3 chapters and answering extended response style questions.
- A typically weekly homework assignment takes the average student 1-2 hours (depending on reading speed).
- Battle reports are internet research reports which take from 45 mins to 1 hour each.

Civil War Elective

- This course is designed for the serious Civil War enthusiast. An in-depth examination of the war, the personalities involved, the issues and the military campaigns are looked at in great detail. If you were always disappointed when your history class rushed through the war and wanted more; than this is the class for you!

Business/Technology Courses 2015-2016

- **Marketing CP1 (BU351)**
- **Personal Finance CP1 (BU361)**
- **Computer Applications for College 1 and 2 CP1 (BU201/211)**
- **Principals of Microeconomics HON (BU323)**
- **Honors Accounting (BU473)**
- **Fundamentals of IT online HON (TE221-O)**
- **Technical Computer Design CP1 (TE231)**
- **Technical Computer Design 3-D 1, 2 HON (TE323/333)**
- **Architecture and Structural Design CP1 (TE431)**
- **Computer Tech 1 CP1 (TE201-A)**
- **Computer Tech 2-3 CP1 pass/fail (TE301-A)**
- **Video Production CP1 (TE211)**



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MARKETING

BU351

Susan Bailey

Marketing

Course Information:

1. Business
2. One Semester
3. CP1
4. Any junior or senior is eligible
5. No Prerequisites
6. No Application Process



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Marketing

Course Description:

- Marketing is a class designed to introduce key marketing concepts to students. Through case studies, group discussions, and other class activities, students will learn the concepts of price, product, promotion, distribution, market research and meeting customer needs.
- Throughout the semester, students will work in teams on various marketing projects designed to expose them to real customers, determine those customers' needs, and develop strategies to achieve those needs.



Marketing

Academic Requirements:

1. Homework- Every class period – 30 minutes
2. Four projects
3. Reading – Each student will have an e-book for regular reading. In addition, we will read excerpts from more current books (such as “Socialnomics” and “Buyology”) and periodicals. All of this reading will be provided electronically.
4. Two hours of work per week



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Marketing

- Examples of student learning:
 - Corporate Social Responsibility (CSR) Project
 - Analysis of Social Media and its impact on Marketing
 - Design and development of Market Research
 - Guest speakers on Marketing careers



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Marketing

- Why should the student take this course?
 - If you are planning on majoring in any business field, you will most likely be required to take an Introduction to Marketing class in college. This course will prepare you for that class. It will also help you decide if a career in Marketing or Sales is right for you!
 - If you are planning on owning your own business, you will need to learn how to meet your customers' needs.



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Personal Finance

BU361

Susan Bailey

Personal Finance

Course Information:

1. Business
2. One Semester
3. CP1
4. Any junior or senior is eligible
5. No Prerequisites
6. No Application Process



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Personal Finance

Course Description:

- Personal Finance is designed to introduce you to key financial concepts so you will have a strong foundation to make important financial decisions throughout your life.
- This course will focus on a variety of very relevant areas such as career development, budgeting, taxes, banking, saving, investing, credit and managing risk.



Personal Finance

Course Description (Continued):

- Students will evaluate various consumer decisions, such as selecting a career, buying a home, saving money in various investment options, and making major purchases.



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Making Money Work:

- Budgeting
- Spending vs. Saving
- Banking

Saving:

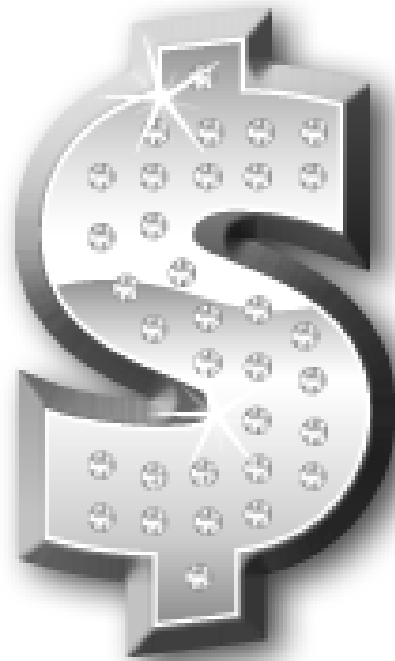
- Paying Yourself First
- Investing – Stocks/Bonds/Mutual Funds

Spending and Other Financial Decisions:

- Credit
- Identity Theft
- Insurance
- Buying a home
- Buying a car

Making Money:

- Identifying careers
- Creating career plan
- Finding a job
- Taxes



Personal Finance Cycle

Personal Finance

- To enhance learning, we will also:
 - Participate in H&R Block Budget Challenge
 - Play the Stock Market Game (UC Economics Center)
- Why should the student take this course?
 - You should take this course because it will prepare you with the necessary skills and knowledge to be financially successful in life. It is one of the most practical and important courses that we offer!



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Computer Applications for College I

BU201

Susan Bailey

Computer Applications for College I

Course Information:

1. Business/Technology
2. Semester – could take Computer Applications for College II after
3. CP1
4. Sophomores, Juniors and Seniors
5. No prerequisites
6. No application process



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Computer Applications for College I

Course Description:

- Computer Applications for College I is designed to teach you the basic software applications that you need to be a successful college student (whether you decide on college or career) and beyond.
- This course is aligned with other courses to introduce you to the specific skills that you will need for future classes, such as writing research papers, using tables, charting and analyzing data, and creating communication pieces and presentations.



Computer Applications for College I

Course Description:

- This course will focus on Microsoft Office 2010 (Word, Excel, PowerPoint, Access) but will also address additional content as needed.



Computer Applications for College I

Academic Requirements:

1. Most work is completed in class
2. Two to three projects per unit
3. Very little reading – mainly hands-on activities



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Computer Applications for College I

- This course is designed to be “student-driven,” meaning that the student will have the resources available to self-learn and cooperatively learn through others.
- Most students master software application skills by “doing” so this course will support that style of learning.



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Computer Applications for College I

- In order to have time to support this “hands on” learning approach, students will be given pre-work, introducing the unit’s objectives, to be completed before class.
- When students arrive in class, I may review and/or teach certain concepts for 15-20 minutes, with the remainder of the time being used for students to complete the necessary projects.



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Computer Applications for College I

- Why should you take this course?
 - This course will teach you how to pace your learning, use resources wisely, and independently think.
 - These are all skills that are critical in college and the workplace.



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Computer Applications for College II

BU211

Susan Bailey

Computer Applications for College II

Course Information:

1. Business/Technology
2. Semester
3. CP1
4. Sophomores, Juniors and Seniors
5. Prerequisite course: Successful completion of Computer Applications for College I. Students who excelled in Tablet Applications may also be considered – approval from instructor required.
6. No application process



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Computer Applications for College II

Course Description:

- Computer Applications for College II is designed to teach you more advanced functionality of Microsoft Office 2010 (Word, Excel, PowerPoint, Access).
- The goal of this course is to achieve Microsoft Office Specialist certification. The credential enables individuals to tap the full features and functionality of the Microsoft Office 2010 system, resulting in increased academic and job performance, individual differentiation and personal confidence.



Computer Applications for College II

Academic Requirements:

1. Most work is completed in class
2. Two to three projects per unit
3. Very little reading – mainly hands-on activities
4. MOS Certification – pursued during the student's own time and at the student's own cost.



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Computer Applications for College II

- This course is designed to be “student-driven,” meaning that the student will have the resources available to self-learn and cooperatively learn through others.
- Most students master software application skills by “doing” so this course will support that style of learning.



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Computer Applications for College II

- In order to have time to support this “hands on” learning approach, students will be given pre-work, introducing the unit’s objectives, to be completed before class.
- When students arrive in class, I may review and/or teach certain concepts for 15-20 minutes, with the remainder of the time being used for students to complete the necessary projects.



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Computer Applications for College II

- Why should you take this course?
 - This course will teach you how to pace your learning, use resources wisely, and independently think.
 - MOS Certification has been proven to increase academic and job performance, especially in the Business, Science, Engineering & Financial industries. It also provides individual differentiation and personal confidence.



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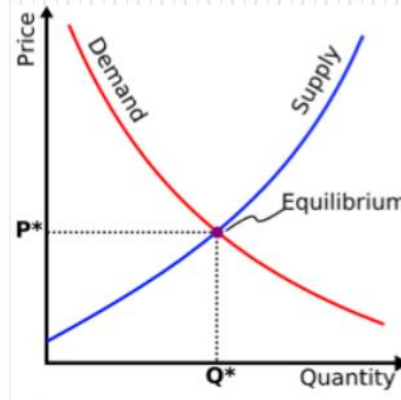
Principles of Microeconomics

BU323 (HONORS)

Mr. James R. Bauer,

B.S. Edu. The Ohio State University

M.Ed. University of Cincinnati



Principles of Microeconomics(HONORS)

Course Information:

1. Information Technology / Business
2. One Semester (One half (1/2) academic credit; three (3) college semester credits)
3. Seniors ONLY
4. Students who are highly self-disciplined.
5. Pre-requisites

Do to the academic rigor, it is recommended to have previously and successfully completed an Advanced Placement course. Principles of Microeconomics (HONORS) is a “labor-intense” course and by successfully completing an academically rigorous course you have proven to be productive.

6. Final acceptance is only provided by Mr. Bauer.



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Principles of Microeconomics (HONORS)

Course Description:

Principles of Microeconomics (HON) is a highly academic rigorous course in the study of the use of scarce resources which have alternative uses. Simply, it is the study of choice. Microeconomics studies the behavior of individuals and small organizations in making decisions about the distribution of these limited resources. This behavior applies to markets where goods and services are bought or demanded and sold or supplied and their respective pricing structures. This is a college level course taught in high school and students may elect to enroll (through dual enrollment) and receive 3 college semester credits that are transferrable to any public college in the State of Ohio through Cincinnati State and Technical College. Since this college level course is taught in only 1 semester, it is greatly recommended that only highly self-disciplined students attempt this course.



Principles of Economics (HONORS)

Academic Requirements:

Keys to academic success in Principles of Microeconomics (HON): Microeconomics is not a class that requires proficiency in higher math. What is important is the ability to organize and analyze information. Because this class is taught at the college level, ***a high level of self-discipline is required*** to successfully complete this course. You cannot afford to get behind in your assignments and to ensure this, you should set up a study schedule that regularly allows you to work on the assigned material in a timely manner.

The following is taken from the Ohio Board of Regents requirements for this course and Archbishop Moeller High School will follow these.

- OSS004 – PRINCIPLES OF MICROECONOMICS
3 Semester Hours
- Related TAGs: Business, Economics, Geography

Learning Outcomes and Academic Skills:

- Understand how economics is a social science that draws conclusions based on hypotheses, theories, and data in order to understand human behavior
- Understand basic microeconomics terms and concepts, including scarcity and choice, equilibrium, efficiency and equity, positive and normative economics, comparative advantage, and specialization.*
- Understand the fundamental economic question of allocating scarce resources*
- Comprehend the concepts of opportunity cost and the production possibility frontier*
- Comprehend supply and demand, the function of prices in markets, and how markets work and sometimes don't work, for example market failure and externalities*
- Comprehend the effects of government intervention in markets*
- Comprehend how consumers make choices *
- Comprehend production theory*
- Comprehend the costs of production*
- Comprehend firm behavior in competitive markets*
- Comprehend firm behavior in imperfect markets*
- Comprehend elasticity and its application
- Comprehend how the markets for resources operate and the determination of wage rates, interest, and rent
- Understand the determination of income distribution, including poverty and discrimination
- Comprehend the determinants of international trade flows
- Apply economic reasoning to better understand and critically evaluate real world circumstances and events

Principles of Microeconomics (HONORS)

- Why should the student take this course?

Economics helps explain concepts related to *how* our market economy works. As a participant in this economic system, it is important to understand the “rules” to be able to “play” better. Also, all college students who major in Business Administration will have to complete an introductory course in economics and this is usually microeconomics.

- What will the student gain from the course?

You may elect (and most students do since there currently is no cost to the student), to enter the dual enrollment program via Cincinnati State College and receive three (3) semesters of college credit transferrable to any public university in the State of Ohio. This is mandated by Ohio’s Board of Regents. For more information, go to Ohio’s Board of Regents web site and search for Transfer Assurance Guide (TAG) courses.



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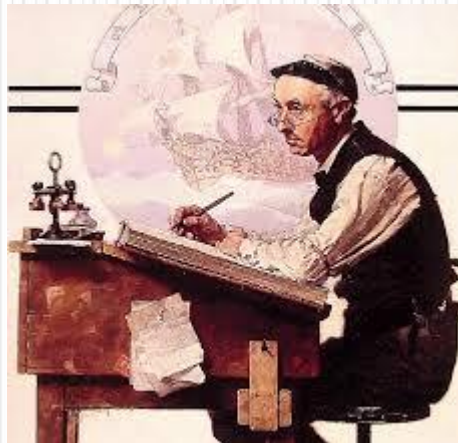


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ACCOUNTING

BU473 (HONORS)

Mr. James R. Bauer,
B.S. Edu. The Ohio State University
M.Ed. University of Cincinnati



Accounting (HONORS)

Course Information:

1. Information Technology / Business
2. Year long (One (1) academic credit; three (3) college semester credits)
3. Seniors ONLY
4. Only students who have previously and successfully completed an Advanced Placement course.
5. Pre-requisites

Must have previously and successfully completed an Advanced Placement course. Accounting (HONORS) is a “labor-intense” course and by successfully completing an academically rigorous course you have proven to be productive.

6. Final acceptance is only provided by Mr. Bauer.



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Accounting (HONORS)

Course Description:

Accounting (HON) is a college level, highly rigorous course in financial analysis. The course will complete an accounting cycle, i.e. analysis, recording, journalizing, posting, preparing financial statements, adjusting, and closing for a cycle. The focus will be on the corporate and pass-through forms of business. The purpose of accounting is to provide meaningful financial information to individuals and institutions that have an interest in the business. Students may elect to enroll (through dual enrollment) and receive 3 college semester credits that are transferrable to any public college in the State of Ohio through Cincinnati State and Technical College. A prerequisite of successful completion of an advanced placement course is required.



Accounting (HONORS)

Academic Requirements:

Keys to academic success in Accounting (HON): This is not a class that requires proficiency in higher math. Although numbers oriented, the math is basic. What is important is the ability to organize and analyze information. Because this class is taken with some lecture and homework is not turned in for credit, ***a high level of self-discipline is required*** to successfully complete this course. You cannot afford to get behind in your assignments and to ensure this, set up a study schedule that regularly allows for work on the assigned material in a timely manner. There is a saying that “to understand accounting, you must *do* accounting.” Colleges expect for every one hour of class you should expect three hours of required homework. Although the homework will not be submitted for grading, the success you will achieve on the quizzes and tests are directly related to your effort and understanding in completing your homework assignments.

The following is taken from the Ohio Board of Regents requirements for this course and Archbishop Moeller High School will follow these.

OBU010-INTRODUCTION TO FINANCIAL ACCOUNTING

Financial Accounting TAG Finalized 11-06-14

Credit Hours: 3-4 Semester Hours

Related TAG: Business

Learning Outcomes and Academic Skills: Any introductory course of study in financial accounting that is included in the Business Transfer Assurance Guide must use business-related material to develop the following general learning outcomes and academic skills:

- 1. Comprehend the broad role that accounting information plays in the economy*
- 2. Comprehend the nature, purposes and use of basic financial statements by all stakeholders*
- 3. Use the language of accounting and apply the important concepts on which financial reporting is based*
- 4. Analyze the impact of basic business transactions on the financial statements of a business corporation*
- 5. Compile basic financial statements for a simple corporate business entity*
- 6. Evaluate the financial performance of a simple corporation on the basis of its financial statements*

Accounting (HONORS)

- Why should the student take this course?

Accounting is the *language of business*, so even if you are not considering accountancy as a major, this course is **required** for any business major.

- What will the student gain from the course?

You may elect (and most students do since there currently is no cost to the student), to enter the dual enrollment program via Cincinnati State College and receive three (3) semesters of college credit transferrable to any public university in the State of Ohio. This is mandated by Ohio's Board of Regents. For more information, go to Ohio's Board of Regents web site and search for Transfer Assurance Guide (TAG) courses.



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FUNDAMENTALS OF I.T.

TE221

**On-Line Course
Facilitator: Mr. Gaier**

Fundamentals of I.T. - online

Course Information:

1. Business / Technology Department
2. Semester Course (offered either semester)
3. Honors Level
4. College Credits available (through U.C.)
5. Sophomores, Juniors, or Seniors
6. Pre-requisites for the course:
 1. Successfully made the honor roll in one of the two previous quarters or “B” average or better in Math course (CP1/HON)
 2. Approval from Mr. Gaier



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Fundamentals of I.T. (online)

- Course is geared to students who have an interest in a career in IT or Computer Science
- Course will be 'online' through University of Cincinnati (with earnable U.C. credits)
- Students will be placed in a study period where a Moeller online facilitator will work with the student and U.C.

** Note: Since this course is not been officially approved, students should have an alternate course in place for this course.



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Fundamentals of I.T. (online)

Academic Requirements:

1. In addition to scheduled class time, students should expect 1 additional hour of work per scheduled class
2. Students should be strong in Math. Must have a minimum of 85 in current math class or made the Moeller honor roll in one of the previous 2 quarters.
3. Students should be able to work independently.



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Fundamentals of I.T. (online)

QUESTIONS ABOUT THE COURSE?

Contact Mr. Gaier (jgaier@moeller.org) or stop by the Technology Center.



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Technical Computer Design (CP1) TE231

Mr. Kolkmeyer



TE231 Technical Computer Design

Course Information:

1. Technology/Business
 2. Semester $\frac{1}{2}$ credit
 3. CP1
 4. Grades 10,11,12
 5. Prerequisite: Math grade 75- 80% Min.
- ✓ Knowledge of geometry and fractions
 - ✓ For more information about the course stop by ITC 1 before or after school.



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TE231 Technical Computer Design (CP1)

- Introduction to technical drawing using Solid Edge
(Solid Edge: high end engineering/design software by Siemens PLM)
- Students will work in the following design areas:
 - Title block layout, lettering, sketching, single-view design, multi-view design, paper model construction and dimensioning tolerances.
- Video examples:
<https://www.youtube.com/watch?v=Yk26WwApWrk>
https://www.youtube.com/watch?v=cF16jzYvv_w
<https://www.youtube.com/watch?v=XbgsgKh3k1E>

TE231 Technical Computer Design

Academic Requirements:

1. Students will complete with detail high level technical drawing problems.
2. Students will be assessed over book terminology.
3. Students drawing skills will be evaluated .
4. Classroom attendance is very important. Many class assignments must be completed during class. Work must be turned in by due date.
5. Success in this course is dependent on class attendance and about 3 hours per week outside the classroom studying for tests and/or finishing drawing problems.



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TE231 Technical Computer Design

- All students at Moeller should take this **Technical Computer Design**.
- Any student that likes to build or take apart things should take **TE231**.
- Today everything that is manufactured has a technical designed drawing behind the process.
- Web sites and further information about Technical Design
- <http://www.ustudy.in/node/10221>
- <http://www.me.umn.edu/courses/me2011/handouts/drawing/blanco-tutorial.html>
- <https://bigfuture.collegeboard.org/majors/engineering-technologies-drafting-design-drafting-design-technology>

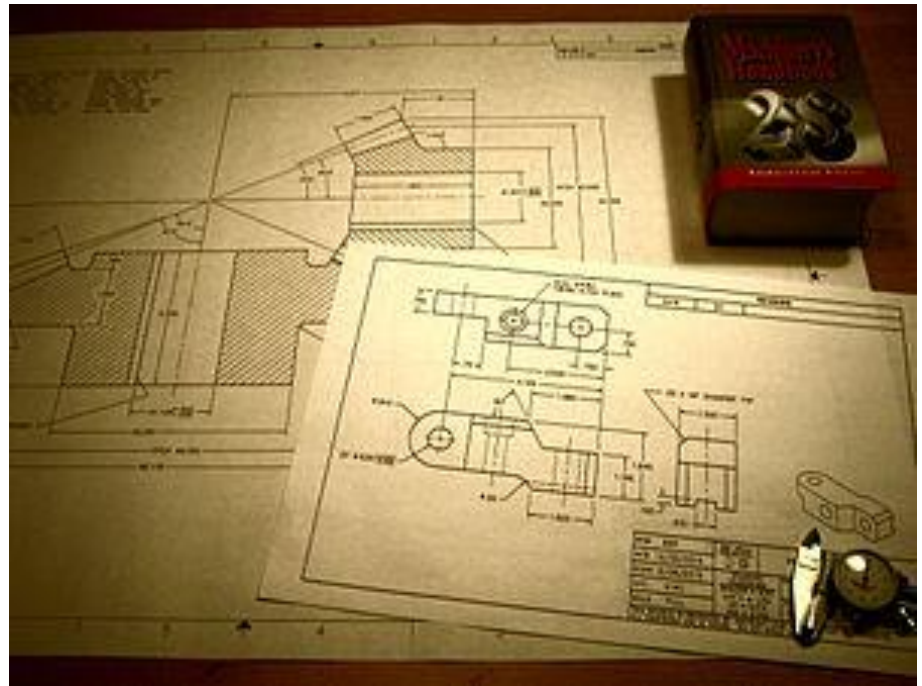


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TE231 Technical Computer Design

Engineering drawing

http://en.wikipedia.org/wiki/Engineering_drawing



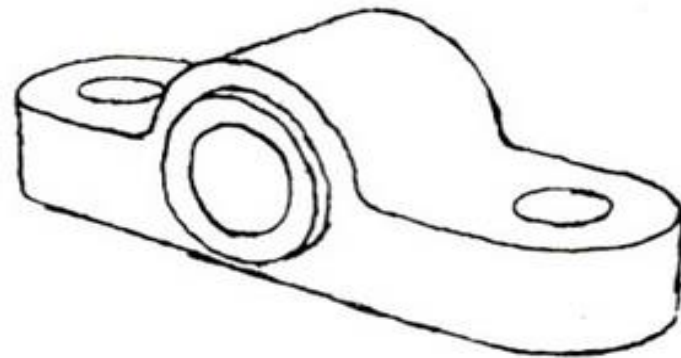
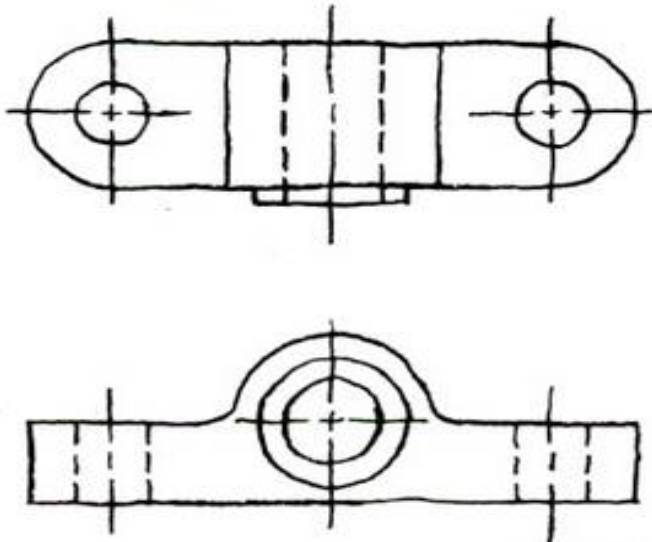
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Sketching view design

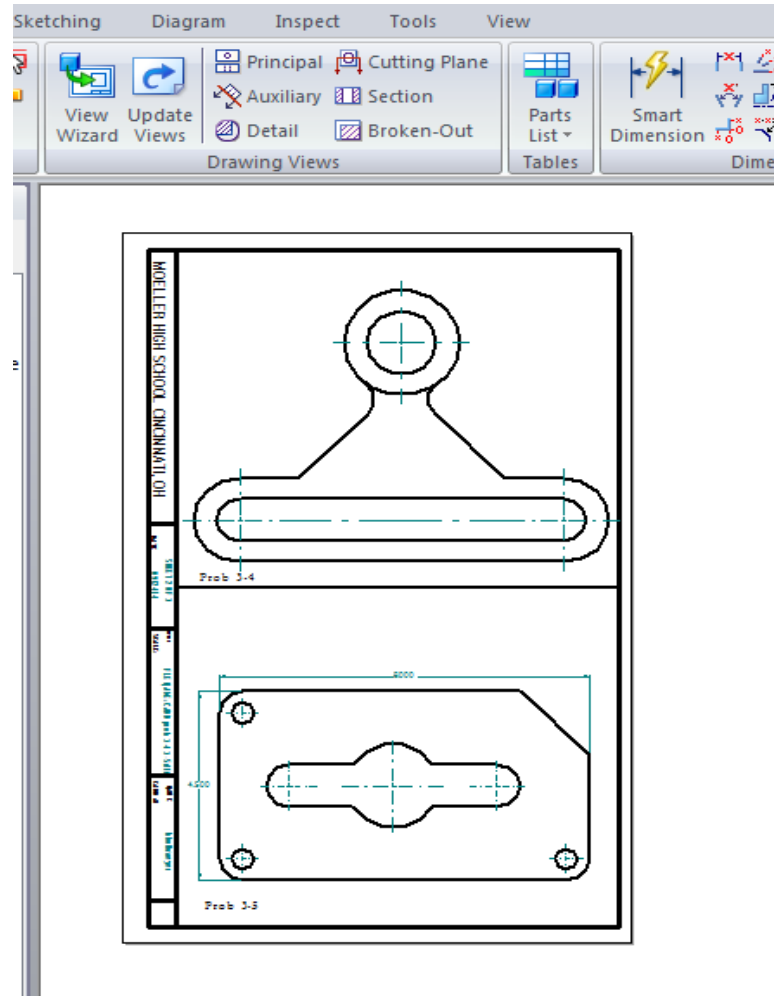
Freehand drawing

The lines are sketched without using instruments other than pencils and erasers.

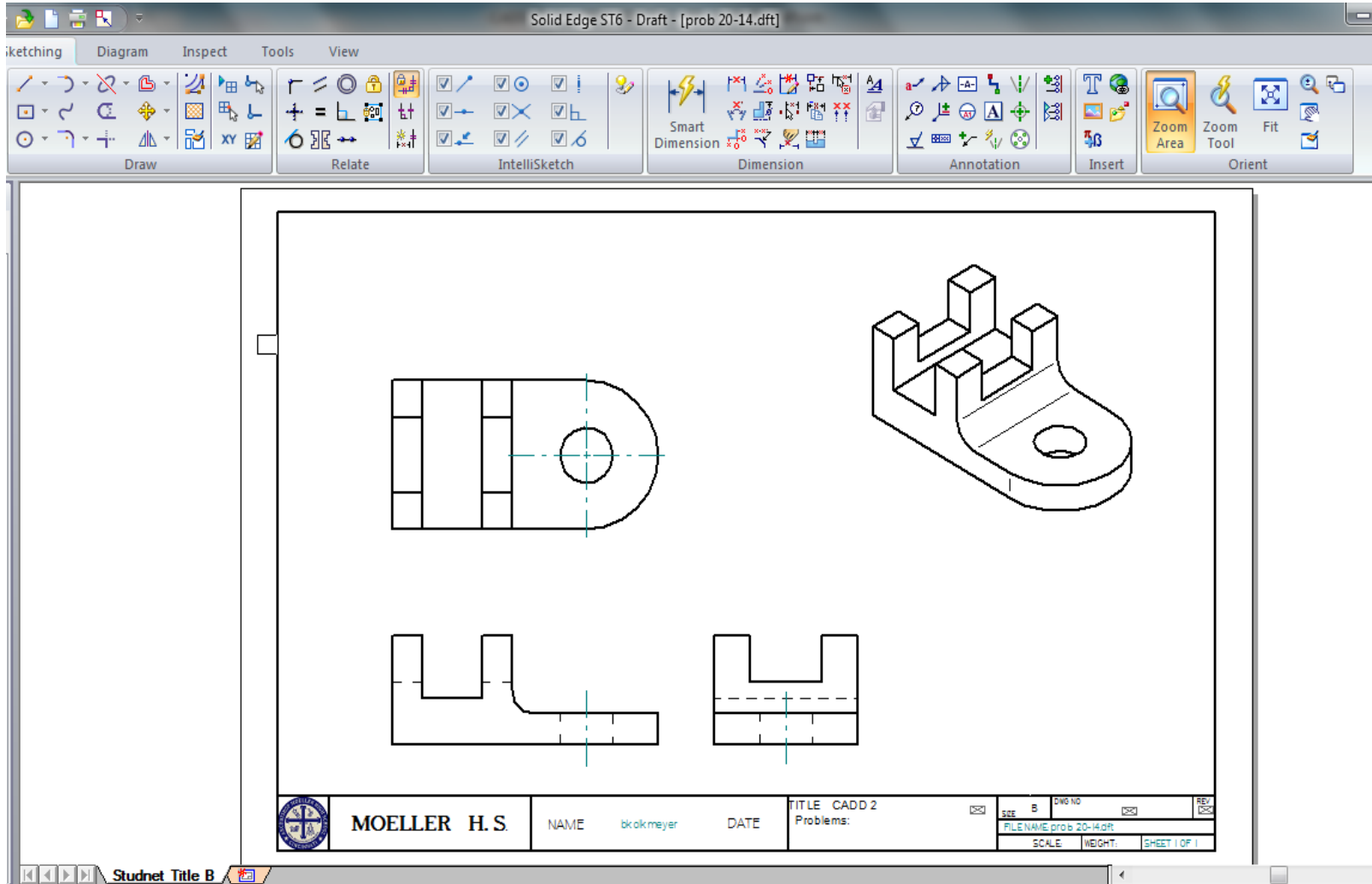
Example



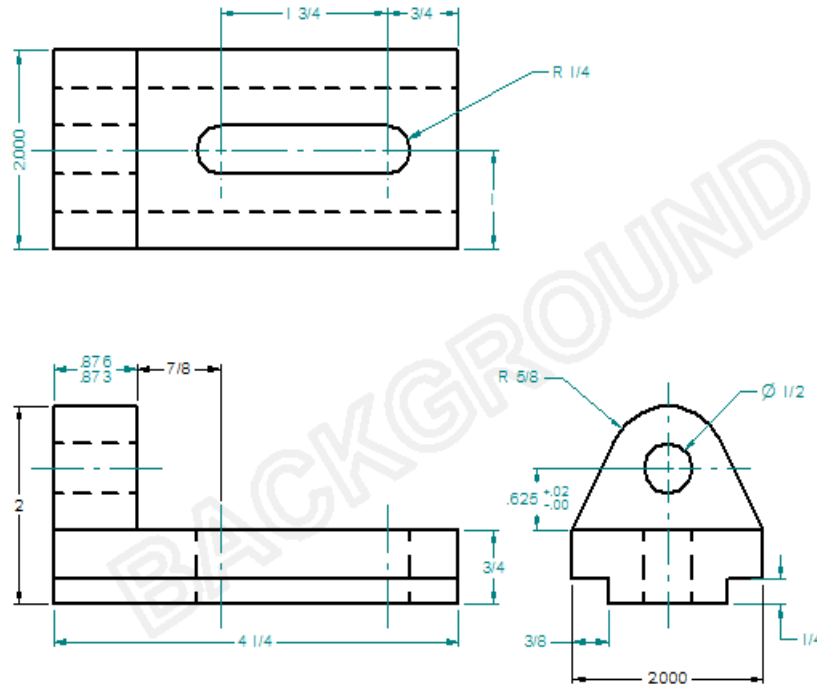
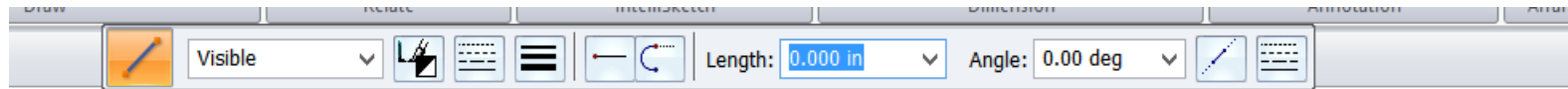
Single view design using solid edge



Multi-view design using solid edge



Multi-view dimensioning tolerances





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Technical Computer Design – 3D (HON) TE323

Mr. Kolkmeyer



TE323 Technical Computer Design–3D (HON)

Course Information:

1. Technology/Business
 2. Semester ½ credit
 3. HON Grades 11,12
 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15)
 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.



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TE323 Technical Computer Design–3D

- Pre-requisite: **Technical Computer Design (TE221)** or **CADD 1** (from 2014-15)
- Ideal for Students interested in Engineering Design.
- Course will concentrate on 3D design using **SOLID EDGE** (the **SOLID EDGE** software from Siemens PLM)
- Students will work in the following design areas:
 - Sectional view design, Auxiliary view design, Fastener / Threads
 - Engineering design: ISO / ANSI part design



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TE323 Technical Computer Design

Academic Requirements:

1. The amount of work a student has is based on how many drawing problems completed to a high skill level. (detail)
2. Students will have Book terminology test.
3. Students will have Drawing Skill test.
4. Classroom attendance is very important. Many class assignments must be completed during class. Work must be turn in with a week of due date.
5. Amount of time expected per week for the student in this course to be successful : Never miss class and about 3 hours outside the classroom per week studying for test or finishing drawing problems.



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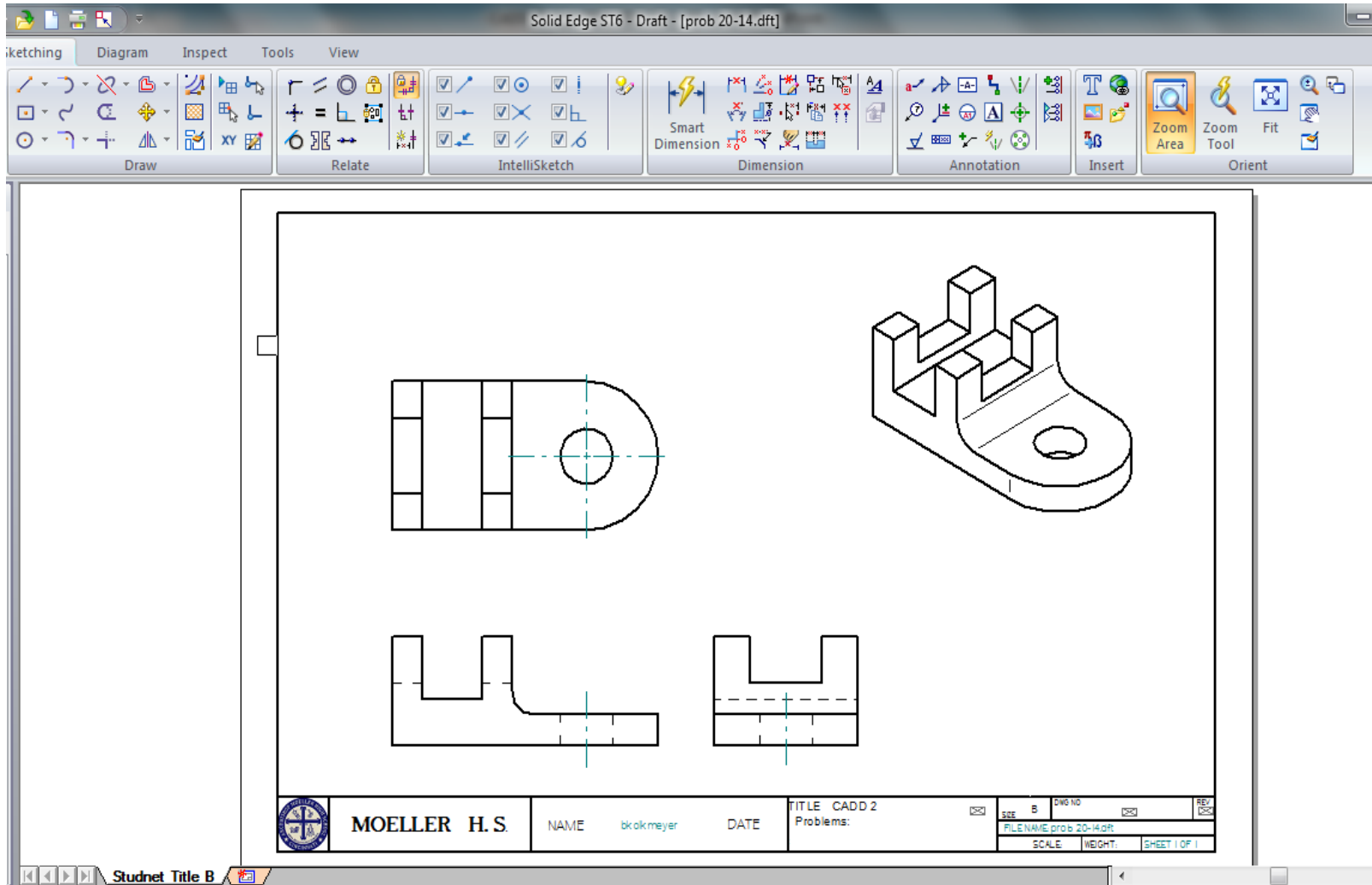
TE323 Technical Computer Design–3D (HON)

- All Pre-Engineering student should take this course.
- Students will develop strong 3D design skills.
- Watch these Videos:
- <https://www.youtube.com/watch?v=oWLrrLkEge4>
- <https://www.youtube.com/watch?v=c1MRuPXrZY0>
- Cool
- <https://www.youtube.com/watch?v=ocqceS7KlzE>



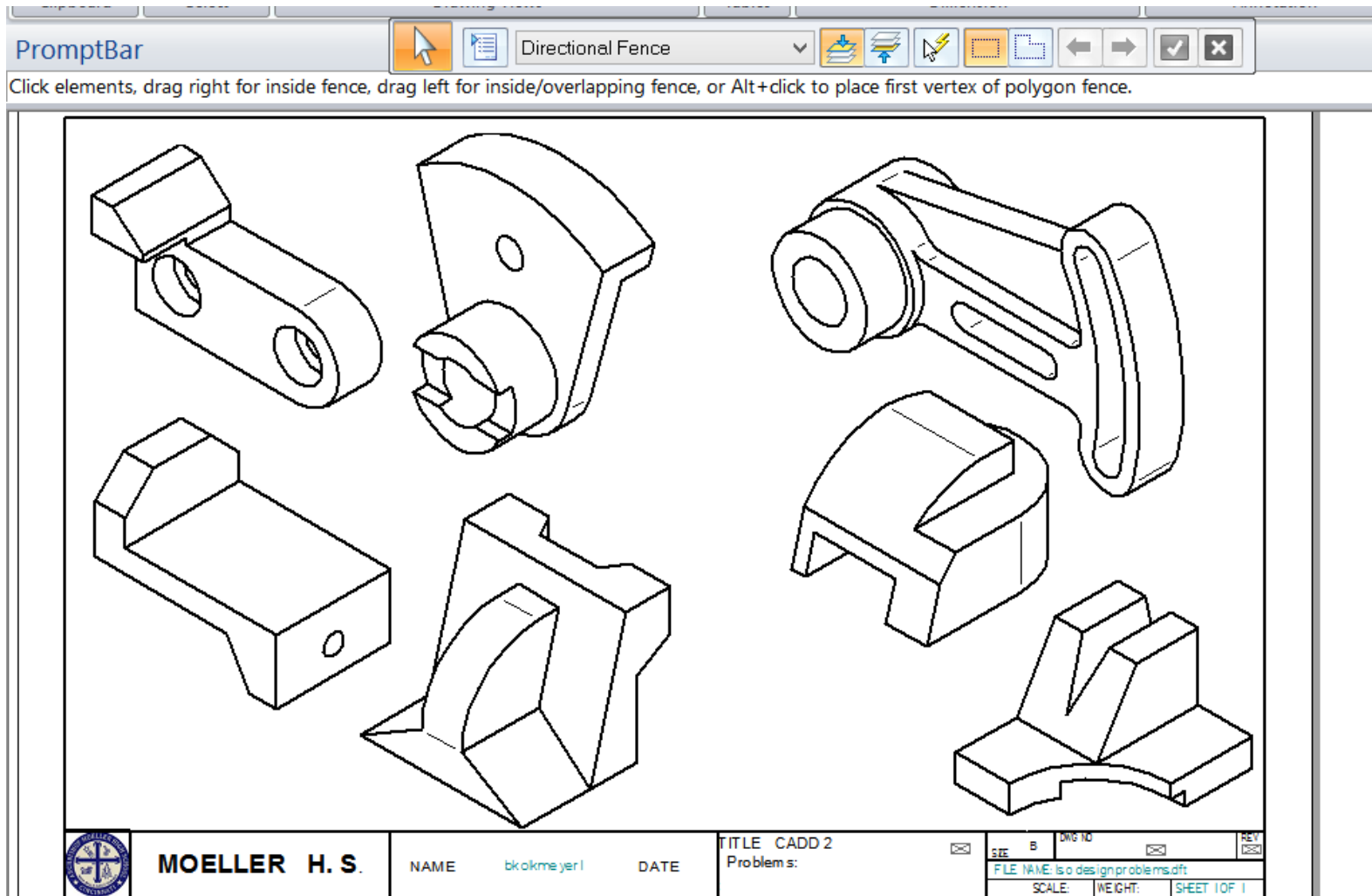
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Multi-view design using solid edge



Engineering design: ISO / ANSI part design

Solid Edge



Part view Sectional view design

Clipboard Select Drawing Views Tables Dimension Dimension Annota

PromptBar Directional Fence

Click elements, drag right for inside fence, drag left for inside/overlapping fence, or Alt+click to place first vertex of polygon fence.

SECTION A-A

DETAIL B

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TITLE			
DRAWN CADD Drawings			
BROCKMEYER1			
SIZE	DATE	01/07/15	REV
B			
FILE NAME: Pully section 10dft			
SCALE:	WEIGHT:	SHEET 3 OF 1	

Sheet1 B-Sheet CADD Title B Student CADD Title B

Part view Auxiliary view design

Clipboard Select Drawing Views Tables Dimension

PromptBar Directional Fence

Click elements, drag right for inside fence, drag left for inside/overlapping fence, or Alt+click to place first vertex of polygon fence.

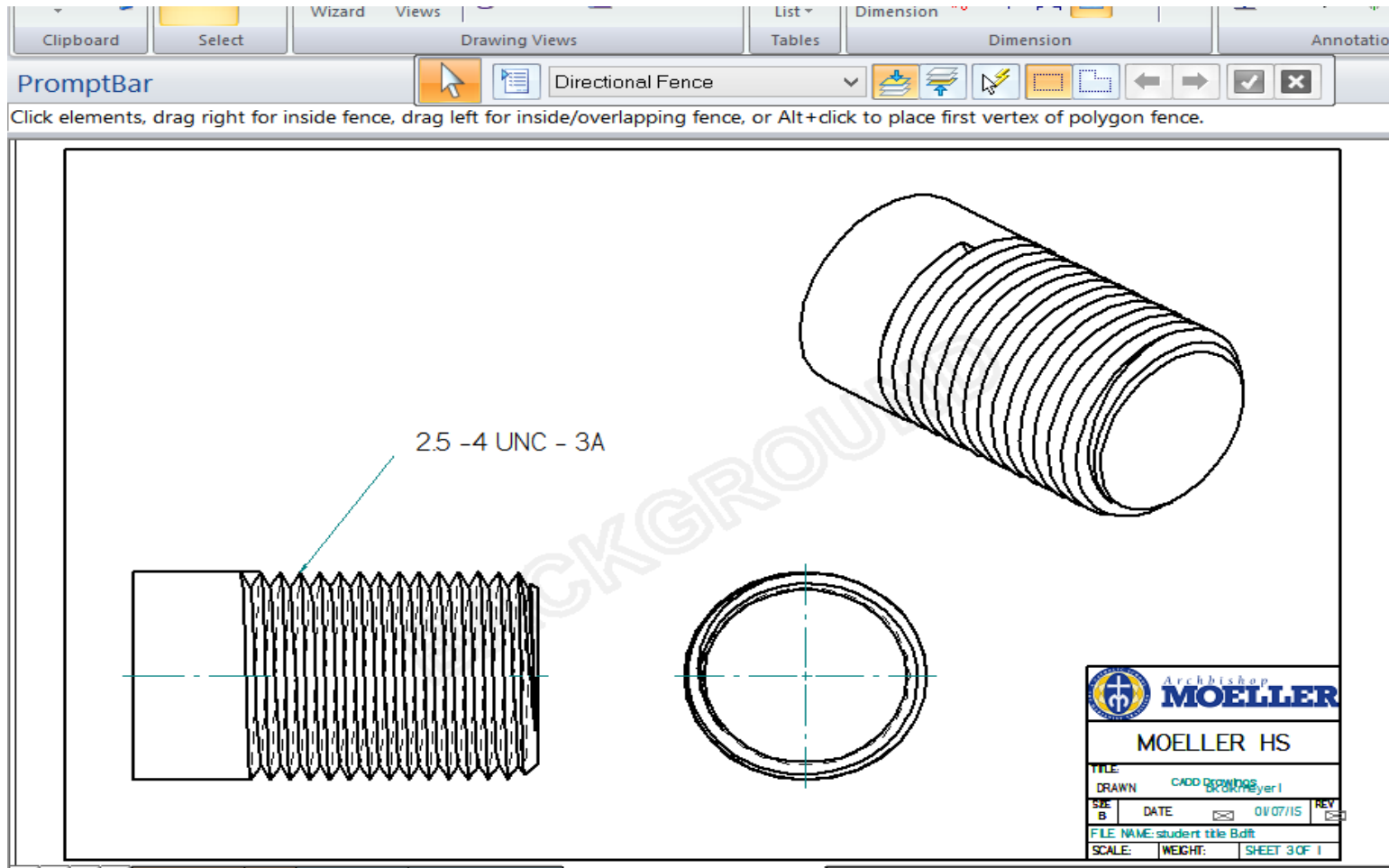
500
1000
750
2000

2500
625
750

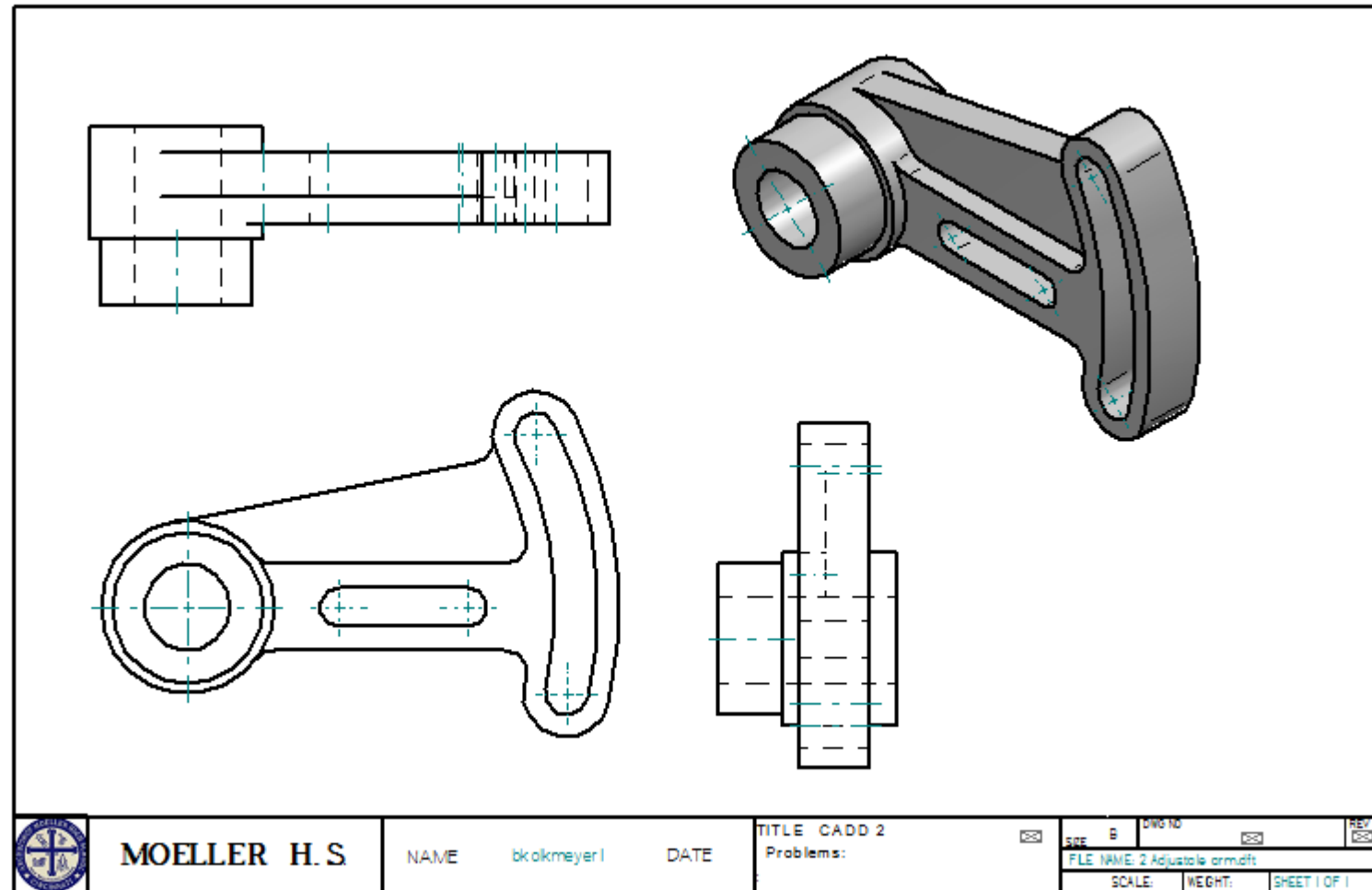
135°
VIEW A-A

NAME	DATE	MOELLER H.S.	
Student		TITLE: CAD 3 Single View Problems	
SCALE	DWG NO	REV	
5			
FILE NAME: Aux Skill 4 2013.dwg	SCALE	WEIGHT	SHEET 1 OF 1

Part view design V-Sharp Thread Detail



SECTIONAL view to 3d PART VIEW





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Technical Computer Design–3D 2 (HON) TE333

Mr. Kolkmeier



TE333 Technical Computer Design–3D 2 (HON)

Course Information:

1. Technology/Business
 2. Semester ½ credit
 3. HON Grades 11,12
 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15)
 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.



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TE333 Technical Computer Design–3D 2 (HON)

1. Prerequisite: Technical Computer Design – 3D (TE323)
2. Course continues on part design with focus on assembly
3. Students will draw and design Cams and Gears.
4. Student projects will be to assemble model parts built on Moeller's MAKERBOT 2 3D printer.
5. Course will concentrate on 3D design using SOLID EDGE

VIDEO EXAMPLE:

<https://www.youtube.com/watch?v=alldcFWyoYs>

https://www.youtube.com/watch?v=_VDfFkPHpxM

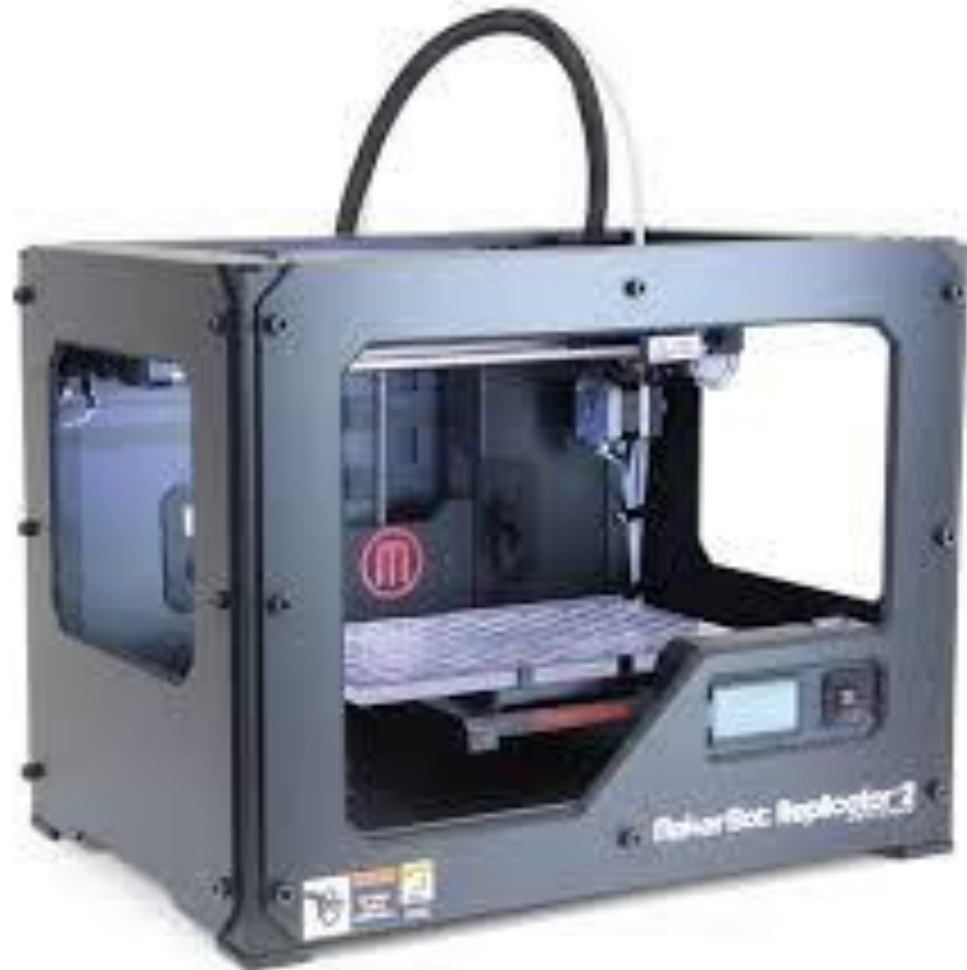
<https://www.youtube.com/watch?v=xcDQbD-tjoE>



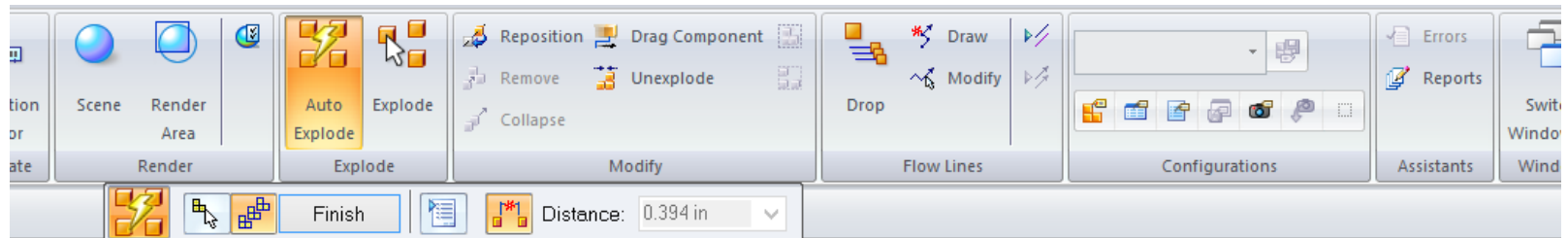
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3D Printer – Makerbot 2

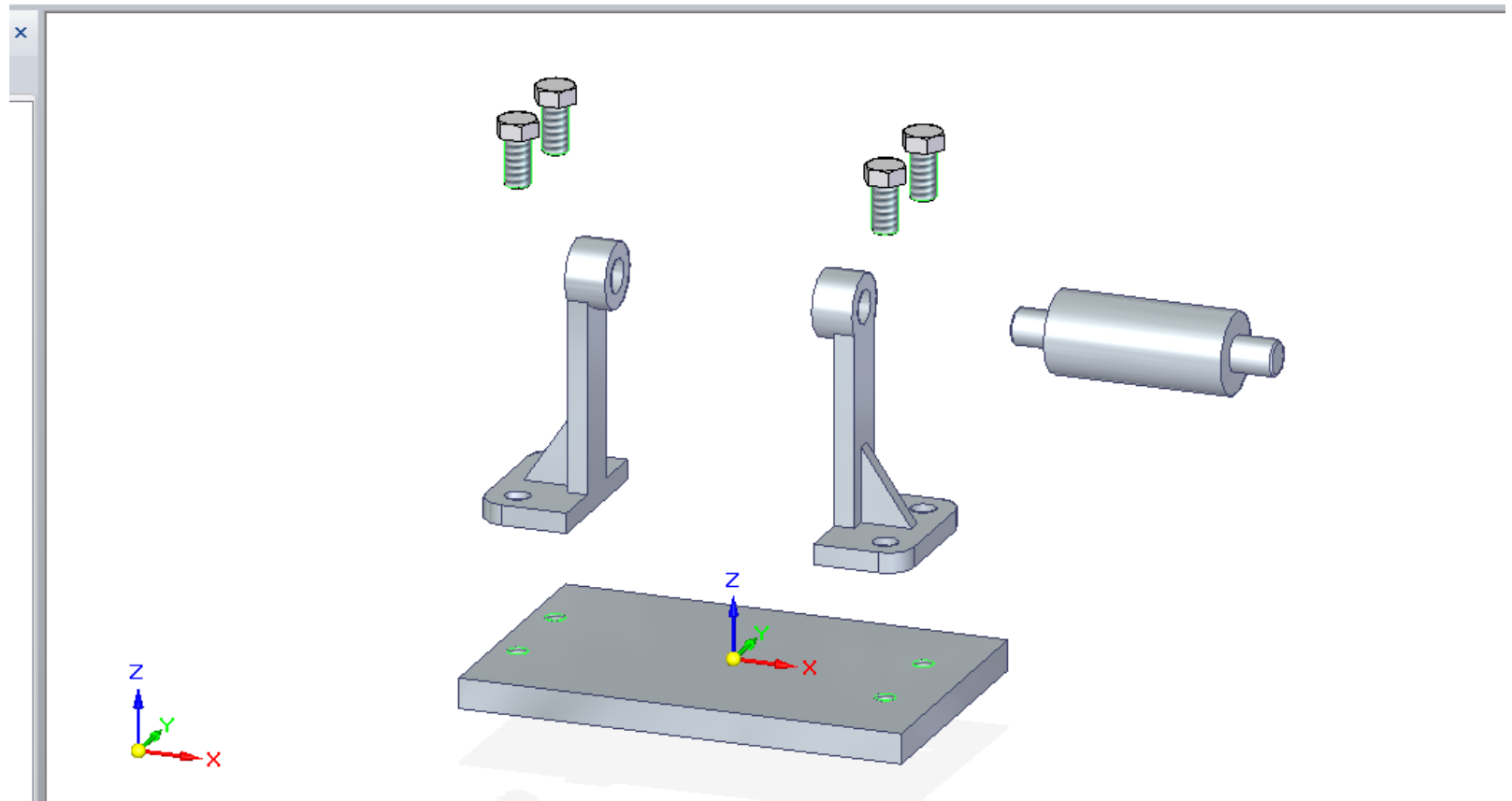
<https://www.youtube.com/watch?v=13hXothTtaU>



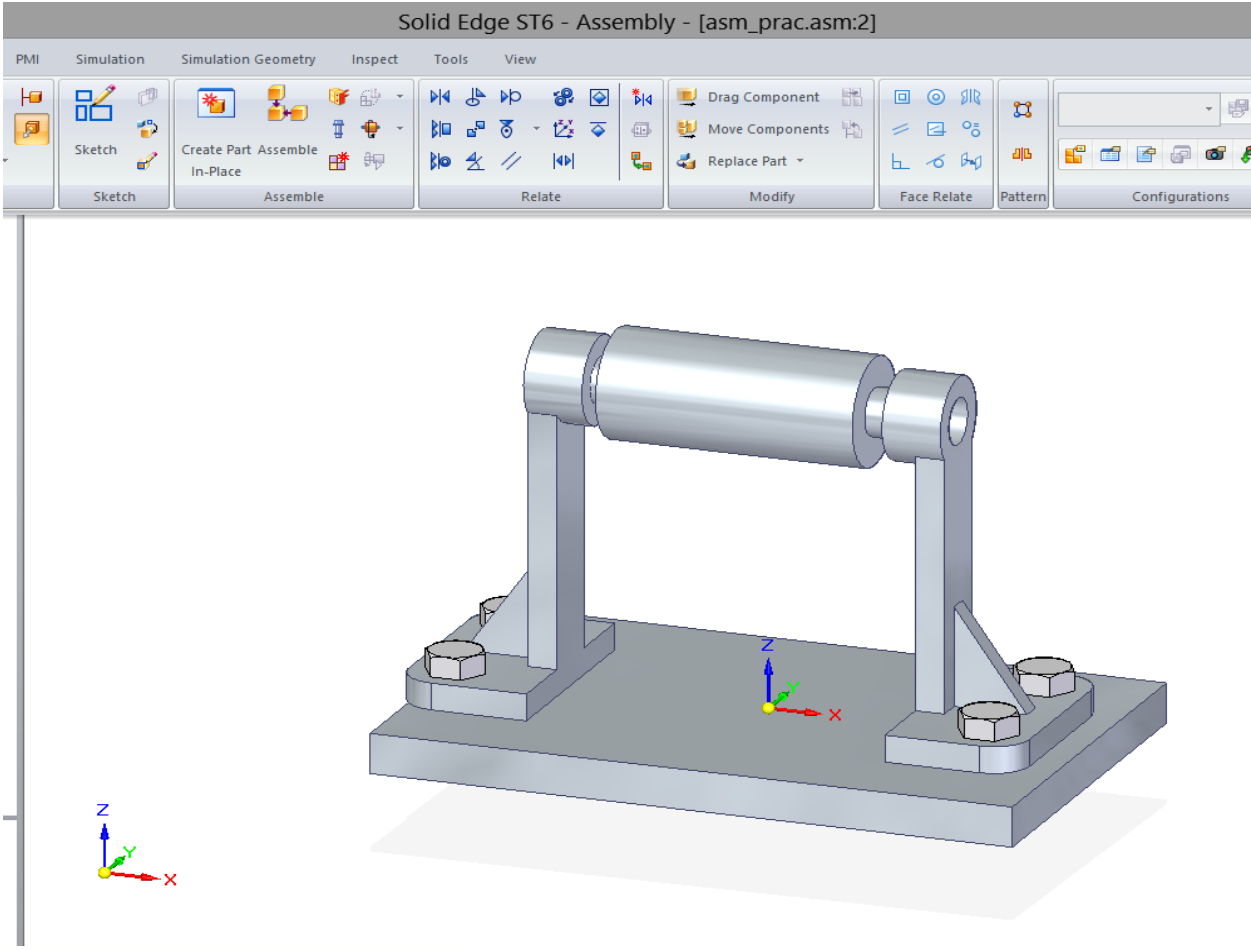
Assembly of parts Exploded



outs or click 'Finish' to complete the explosion.

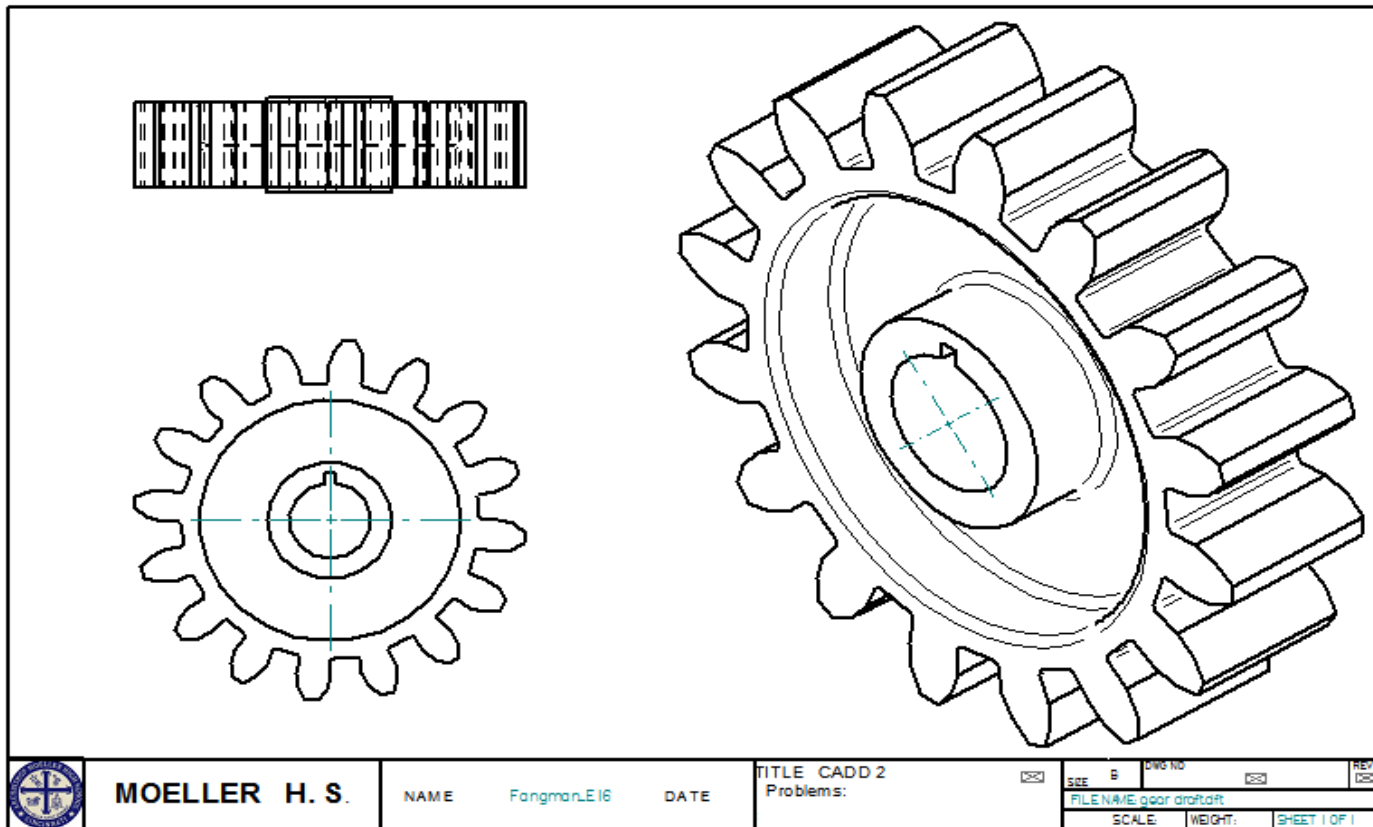
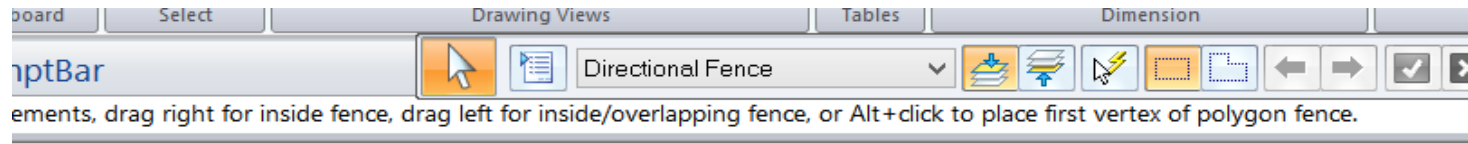


Assembly

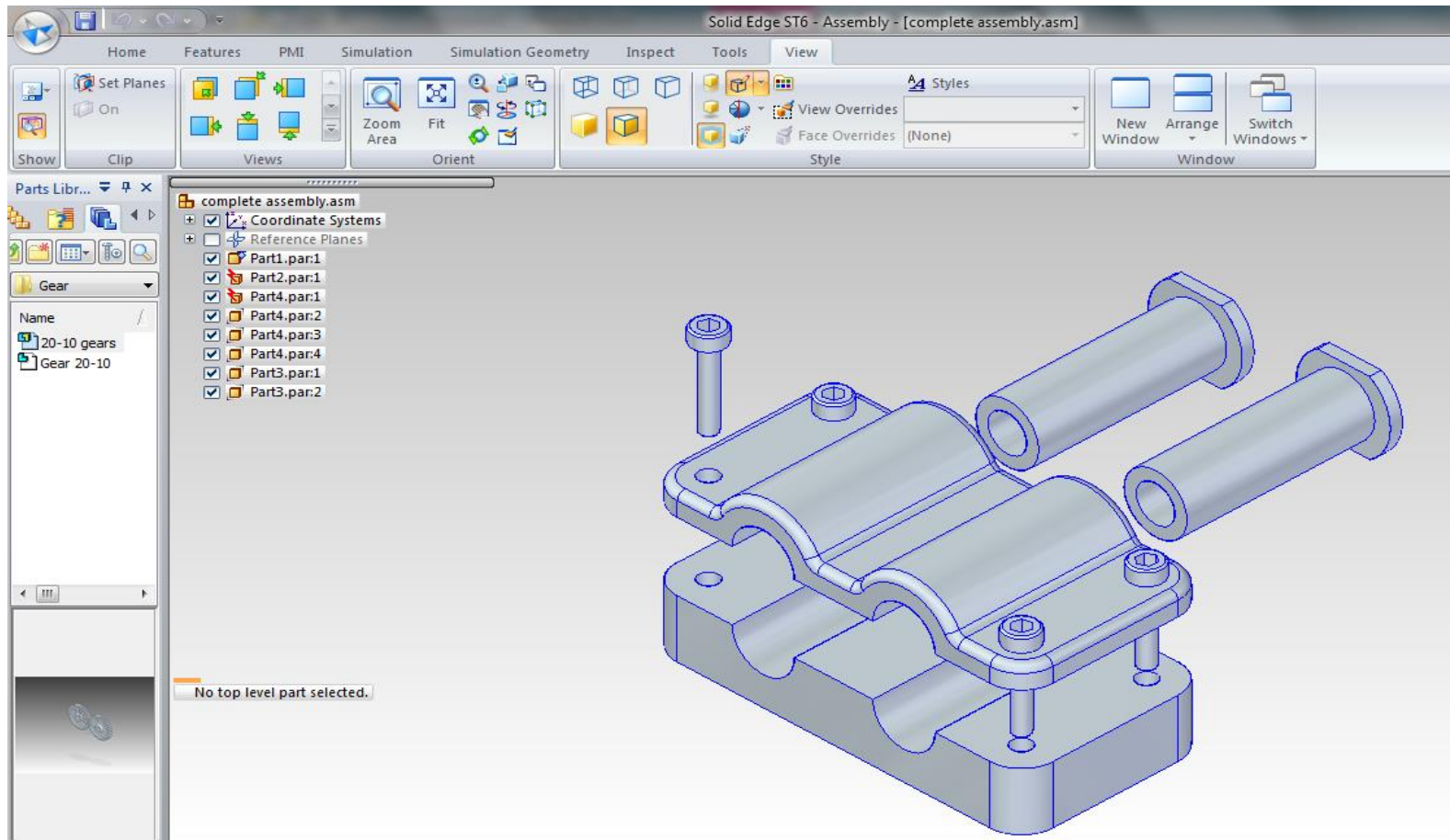


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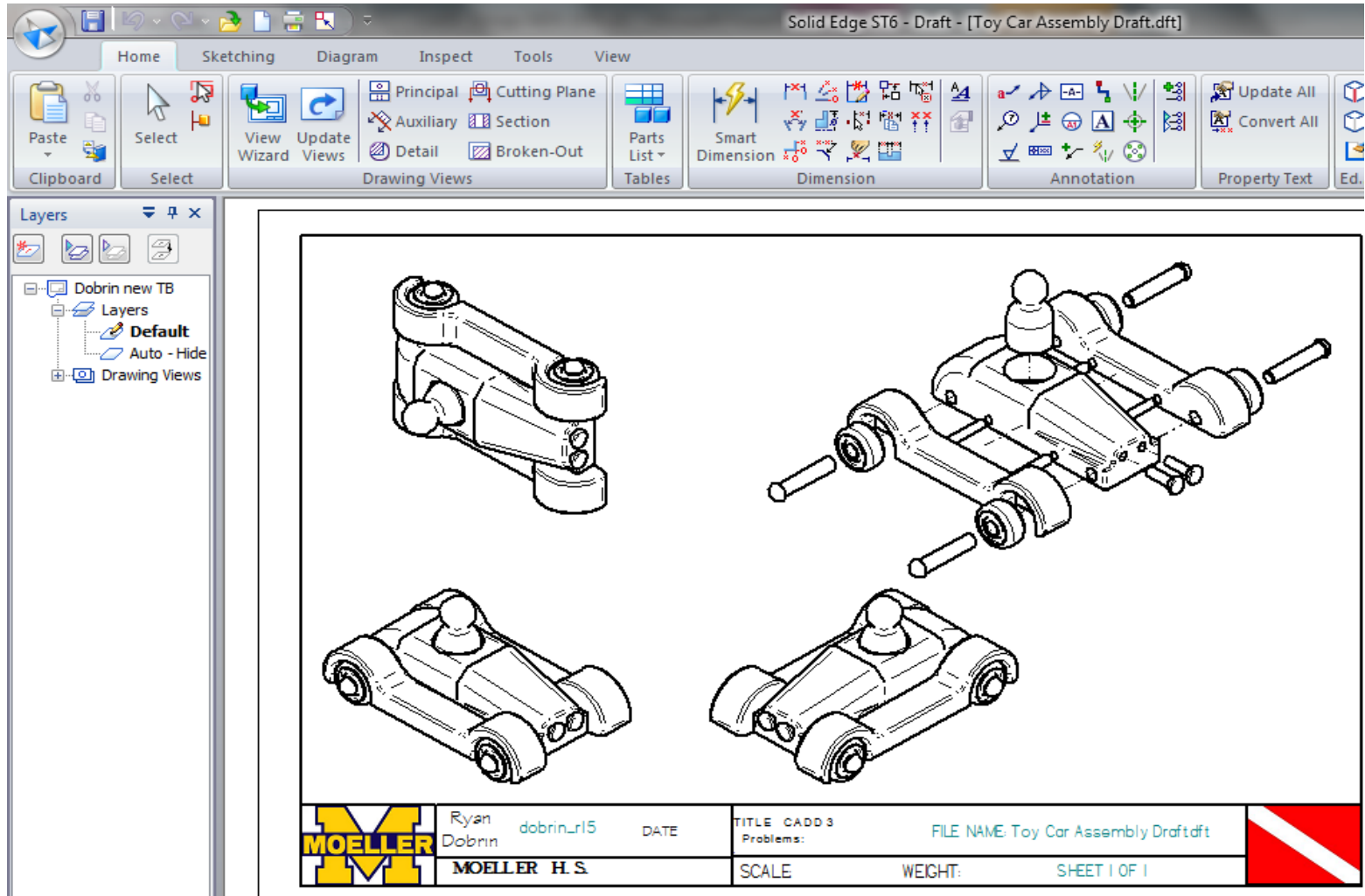
Spur Gear Design



Assembly of parts



assembly of parts, explode views





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ARCHITECTURE & STRUCTURAL DESIGN (CP1) TE431

Mr. Kolkmeier



TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

Course Information:

1. Technology/Business
 2. Semester ½ credit
 3. HON Grades 11,12
 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15 school year)
 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.



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TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

- FOR THOSE STUDENTS WHO ARE INTERESTED IN ARCHITECTURE AND CONSTRUCTION DESIGN, THIS IS A GREAT OPTION FOR SENIORS.
- SENIORS IN THIS COURSE WILL ASSEMBLE A MODEL HOUSE USING FOAM BOARD AND BALSA WOOD AND USE CAD SOFTWARE FOR THE DESIGN.
- STUDENTS ARE RECOMMENDED TO HAVE CADD 1 TO TAKE THIS COURSE BUT NOT REQUIRED. MY APPROVAL IS NEEDED TO TAKE THIS COURSE.
- IF YOU HAVE QUESTIONS ON THIS COURSE OR ANYTHING THAT I HAVE PRESENTED, PLEASE CONTACT ME VIA EMAIL (BKOLKMEYER@MOELLER.ORG) OR STOP AND SEE ME IN THE TECHNOLOGY CENTER.

TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

- **Prerequisite: Technical Computer Design (TE221) completed.**
- **Course will focus on residential architecture and construction design**
- **Student project will be to assemble a model house using foam board and Balsa wood.**
- **Course will use CAD software for design.**
- **Need approval from Mr. Kolkmeier to take course.**



TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

Course Information:

1. Technology/Business
 2. Semester ½ credit
 3. HON Grades 11,12
 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15 school year)
 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.



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TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

Course Information:

- FOR THOSE STUDENTS WHO ARE INTERESTED IN ARCHITECTURE AND CONSTRUCTION DESIGN, THIS IS A GREAT OPTION FOR SENIORS.
- SENIORS IN THIS COURSE WILL ASSEMBLE A MODEL HOUSE USING FOAM BOARD AND Balsa WOOD AND USE CAD SOFTWARE FOR THE DESIGN.
- STUDENTS ARE RECOMMENDED TO HAVE CADD 1 TO TAKE THIS COURSE BUT NOT REQUIRED. MY APPROVAL IS NEEDED TO TAKE THIS COURSE.



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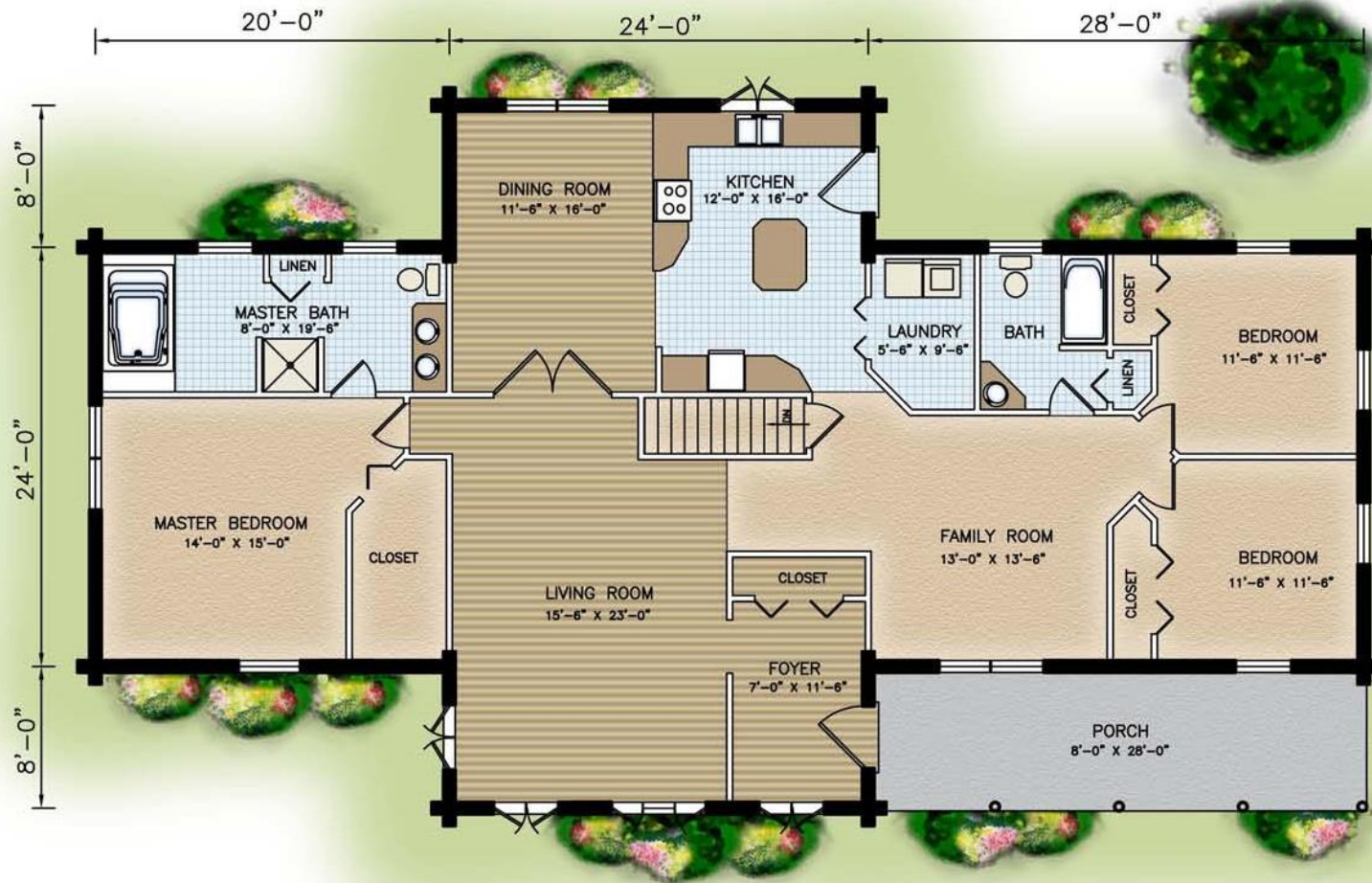
TE431 ARCHITECTURE & STRUCTURAL DESIGN (CP1)

- Model House Building

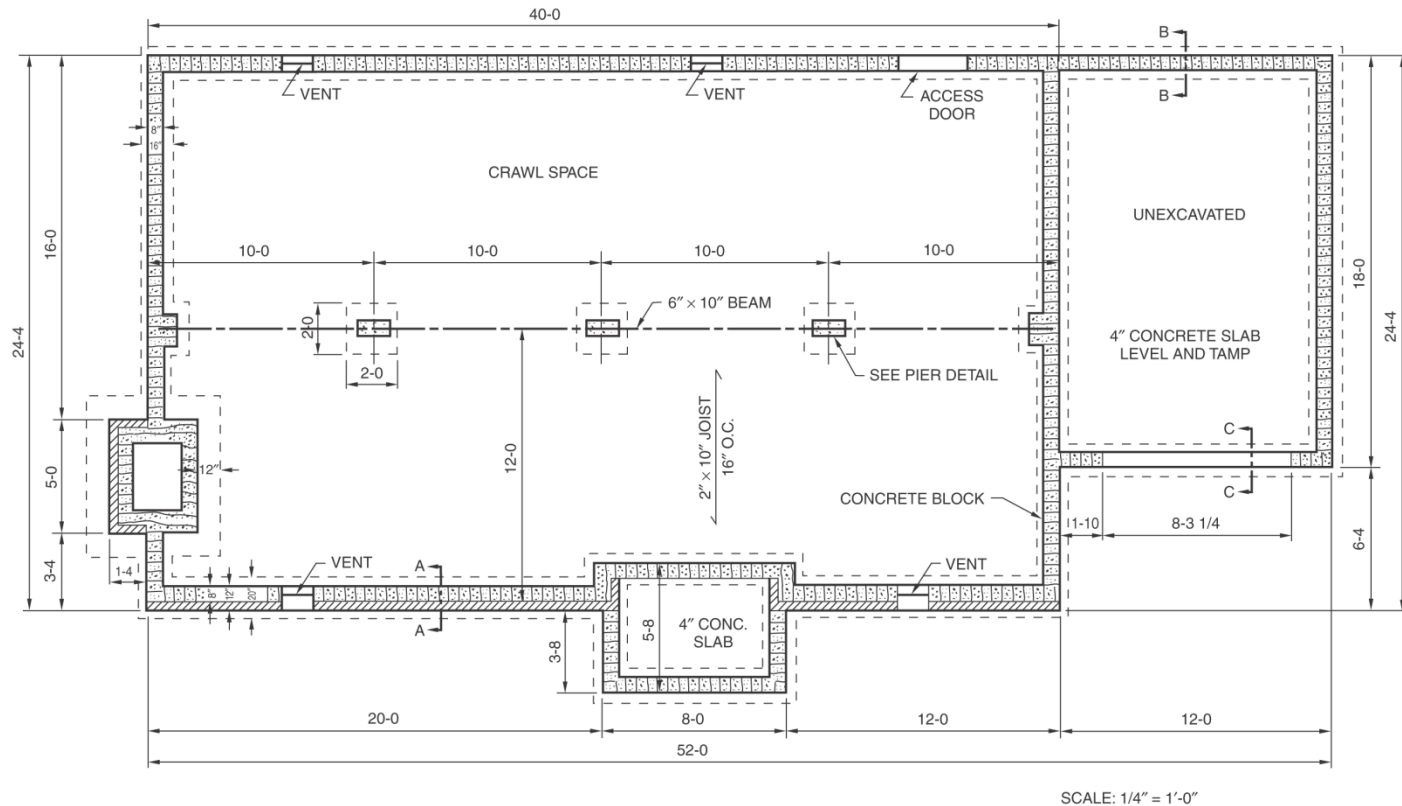


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Project: build your dream house



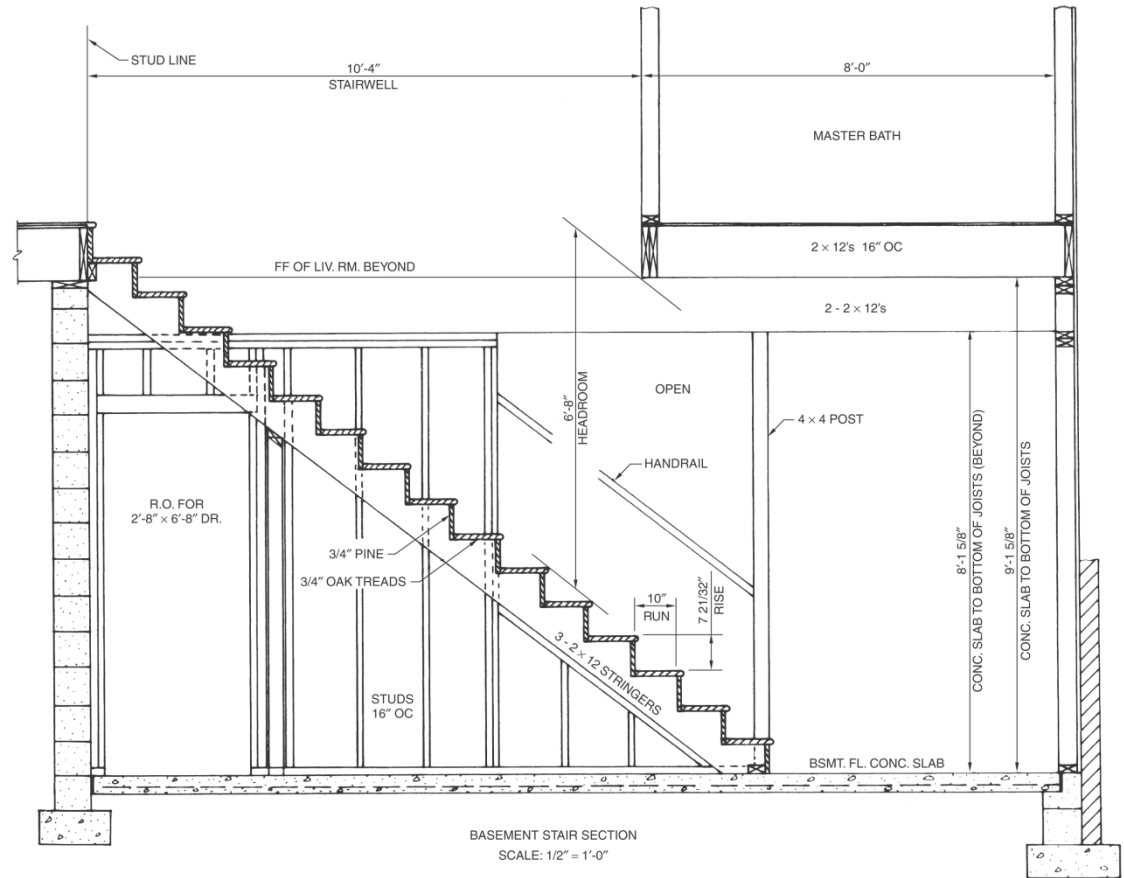
Drawing a Foundation Plan



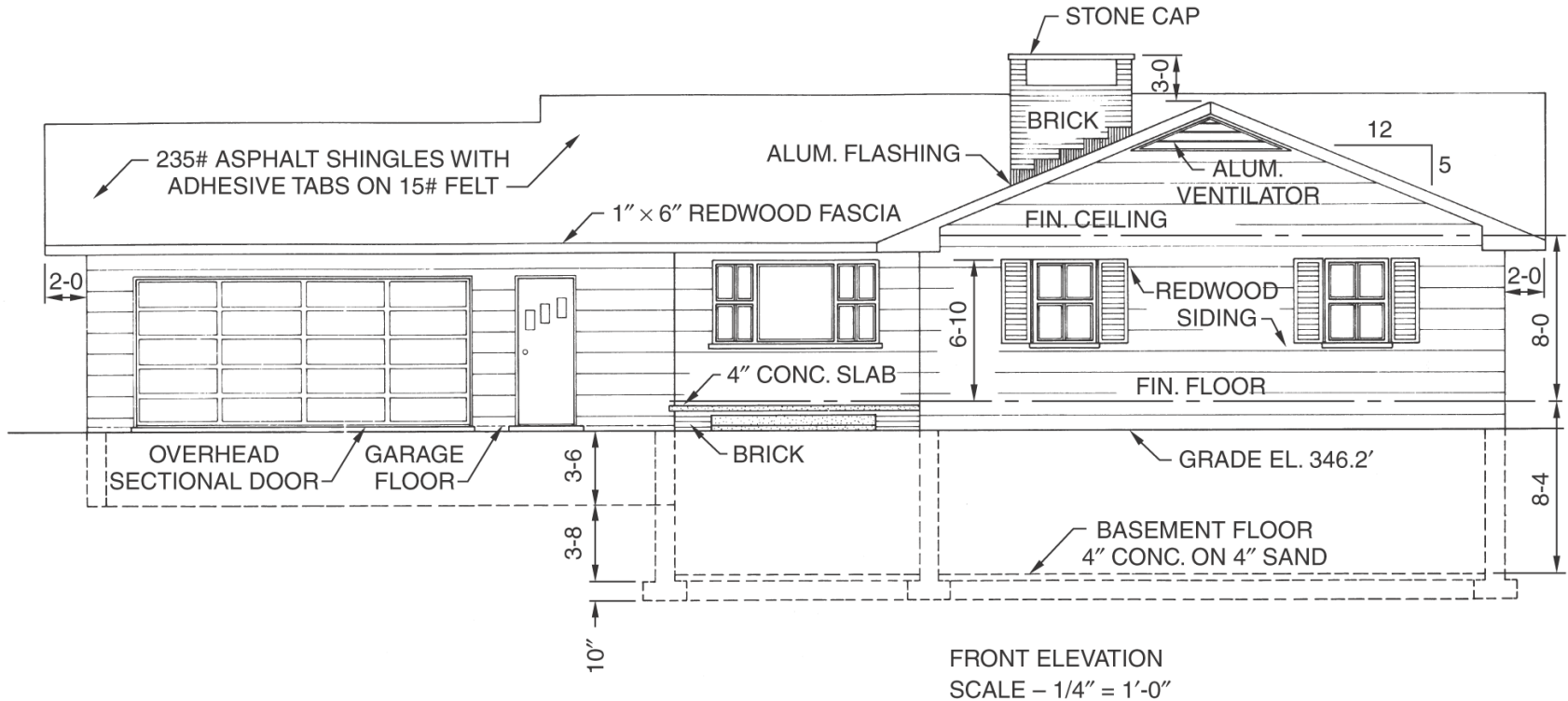
- Completed foundation plan.

Structural Details

- Typical stair detail.

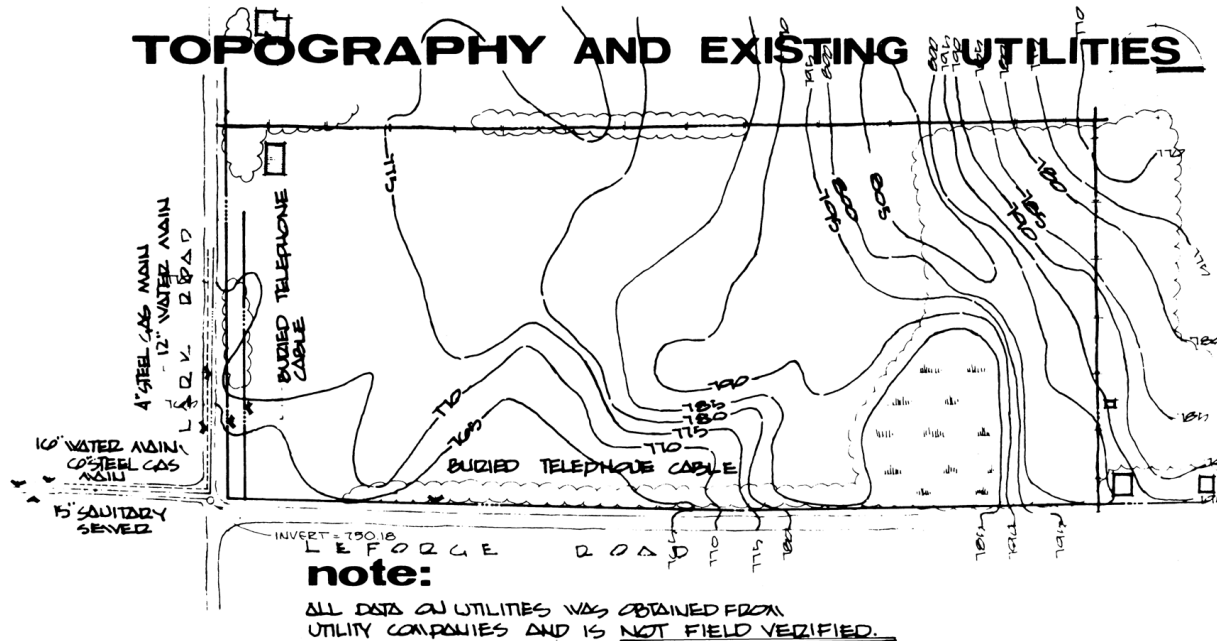


Drawing an Elevation—Manual



- Steps 7, 8, and 9.

Site Topography



- This site plan shows the topographical features of the site.

ARCHITECTURE & STRUCTURAL DESIGN

My father is an architect and my brother wishes to become one as well. According to my father, you need to take basic mathematics courses as well as tech courses. You do not need to take calculus in high school, but it is a good idea to take it simply to get into a college easier and it can give you an extra edge. If your high school offers CAD (Computer Aided Drafting) or any sort of classes that involve something in the technological department, take them. If your school does not offer engineering and design classes, perhaps you can take a summer course at another school or if you really must, transfer. Physics is a good course to take for architecture, but it isn't really required as well. A good idea is to take a drawing course whether that be art class or engineering. Being able to draw well helps an architect making corrections on prints.



ARCHITECTURE & STRUCTURAL DESIGN

*CAD isn't required as a course in high school; instead, it is strongly recommended since you will use a form of CAD when you are an architect. Architects use computer technology today (such as CAD) unlike the old days where more mathematics was involved. A newer program is Revit. Today you need to know more about how to work the computer than the actual math itself. As far as classes go in high school, a general spectrum of courses are acceptable. You can attend the smallest technical college yet still become a well-balanced architect. "Choose classes that you will enjoy and will relate somewhat to architecture; most likely technological courses like CAD to even small engines or home maintenance" ~spoken from my father



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COMPUTER TECH 1

TE201-A

Teacher: Mr. Kolkmeyer

Computer Tech 1

Course Information:

1. Department: Business/Technology
2. Semester Course, ½ Credit
3. Level: CP1
4. Grade Level: 10, 11, 12
5. Pre-requisites: must have approval from Mr. Kolkmeyer
6. Geared towards students who have an interest in I.T. and computer repair.



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Computer Tech 1

- Course is geared to students who have an interest in a career in I.T.
- Students will learn how to repair Moeller issued tablets and computers, learn the workings of a computer help desk, and basic I.T. support functions.
- Students will have “hands-on” computer repair experience.



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Computer Tech 1

QUESTIONS ABOUT THE COURSE?

**Contact Mr. Kolkmeyer
(bkolkmeyer@moeller.org) or stop by the
Technology Center.**



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COMPUTER TECH 2-3

TE301-A

**Teacher: Mr. Kolkmeyer
or Mr. Gray**

Computer Tech 2-3

Course Information:

1. Department: Business/Technology
2. Semester Course, ½ Credit
3. Level: CP1
4. Grade Level: 10, 11, 12
5. Grade is “Pass/Fail”
6. Pre-requisites:
 1. must have approval from Mr. Kolkmeyer or Mr. Gray
 2. Computer Tech 1 preferred but not required.
7. Geared towards students who have an interest in I.T. and learning Computer Help Desk support.



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Computer Tech 2-3

- Course is geared to students who have an interest in a career in I.T.
- Students will learn the workings of a computer help desk, and basic I.T. support functions.
- Students will have “hands-on” help desk experience.



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Computer Tech 2-3

QUESTIONS ABOUT THE COURSE?

Contact Mr. Kolkmeyer
(bkolkmeyer@moeller.org) or Mr. Gray
(ggray@moeller.org) or stop by the Technology
Center.



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VIDEO PRODUCTION

TE211

Teacher: Mr. Gray

Video Production

Course Information:

1. Department: Business/Technology
2. Semester Course, ½ Credit
3. Level: CP1
4. Grade Level: 10, 11, 12
5. Pre-requisites: none
6. Geared towards students the multimedia aspects of video and technology.



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Video Production

- You will be working in groups and individually
- Equipment to learn.
 - 1. Camcorders for video and audio capture.
 - 2. Live Production Mixer/Switcher and equipment
 - 4. Video Editing using Adobe Premiere pro.
- In video production we will learn how to
 - write shoot and edit videos/movie shorts.
 - Film live events using a multi-camera video mixer
 - Advanced editing techniques and compositing using green screen animation.



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Video Production

Academic Requirements:

1. There will be some time spent at home working on editing but most of our work is done in class
2. There are 4 main projects
3. Students will be required to film a live event at some point in the semester (EX: School Mass or assembly.)
4. Students will be required to work in groups to complete projects.



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Video Production

Why should the student take this course??

- If you are interested in Media production. Radio or television, Graphics, Informatics. This class is for you.
- You will gain the knowledge to go through all the steps needed to take a production from concept to finished product, learning how to write, plan, shoot, and edit.



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Video Production

QUESTIONS ABOUT THE COURSE?

Contact Mr. Gray (ggray@moeller.org) or stop by the Technology Center.



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World Language Courses 2015-16

- **Spanish**
- **French**
- **Latin**
- **German**



WORLD LANGUAGES DEPARTMENT

FRENCH

GERMAN

LATIN

SPANISH

GENERAL INFO:

- IF YOU ARE CONTINUING IN THE SAME LANGUAGE– CONSULT YOUR CURRENT TEACHER FOR A RECOMMENDATION
- 2 YRS OF A THE SAME LANGUAGE (SUGGESTED MINIMUM FOR COLLEGES)
- 3 YRS- HIGHLY RECOMMENDED, NECESSARY FOR “AWARD OF DISTINCTION”

CP2* only for students w/special needs or MAPS

- CP2 STUDENTS TAKING LANGUAGE FOR 1ST TIME– SEE DEPT CHAIR, MRS. KEYSER IN RM. 247 OR EMAIL HER
- ONLY CP2 LANGUAGE AVAILABLE IS SPANISH (1 & 2)
- CP2 SPANISH 2 IS ONLY AVAILABLE TO THOSE WHO HAVE COMPLETED CP2 SPANISH 1

UPPER LEVELS

- 3RD , 4TH AND 5TH YEAR LEVELS ARE HONORS
--EXCEPTIONS: (as numbers permit)
 - Spanish 3 has honors and cp1 levels
 - Latin 4/5 will be AP only
 - Spanish 4/5 will be honors only
- Check course descriptions on the Moe web page for specific prerequisites and more details

CHANGES FOR NEXT YEAR

- Latin I will give preference to freshmen, sophomores and juniors wishing to take the language--- seniors only if space permits
- Latin 4/5 will be offered on AP level instead of honors
- Spanish 4 will be honors and AP; If there are enough students in Spanish 4/5, a cp1 section could possibly be opened

QUESTIONS??????? **See Mrs. Keyser**
in 247

***THANK YOU FOR YOUR
INTEREST!***





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FRENCH 1, 2, 3, 4

WL101, WL201, WL303, WL403

Elena D. Keyser

French 1-4

Course Information:

1. World Languages Department
2. Year long course
3. College prep 1 for levels 1 and 2; honors for levels 3,4
4. French 1 no prerequisite; upper levels must have approval of their current teacher and have at least a C average is recommended



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French 1-4

Course Description:

- **General overview of the course:**
- French 1 CP1 introduces the basic skills of listening, speaking, reading, and writing, along with a basic introduction to French culture. It includes the study of grammar and will help students in strengthening their English skills as well.
- Prerequisite: None.



French 1-4

Academic Requirements:

1. Expect at least 30 mins of homework per night
2. one project per quarter
3. Daily practice is more effective than spending more time in one large block
4. Homework and assignments will become increasingly more challenging with the higher levels



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French 1-4

- Academic/rigorous-students should expect homework after each class period minimum of 30 minutes. Practice is essential for language acquisition. The students will be required to give presentations, and undergo frequent evaluation in different forms.
- Open channel of communication between teacher, student and parents—email is by far the quickest form of communication
- Tablet PC expectations: computers are used frequently, student must be able to have DyKnow, internet and other computer programs used in the class in good working order and ready to use.



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LATIN I, II, III, IV

WL121, WL221, WL323 (HON), WL424 (AP)

MAGISTER COMPTON

LATIN I – WL121

COURSE DESCRIPTION

1. FULL YEAR WORLD LANGUAGE COURSE
2. PREREQUISITES: RECOMMENDATION FROM GUIDANCE OR ADMISSIONS TO TAKE A WORLD LANGUAGE
3. CP I LEVEL

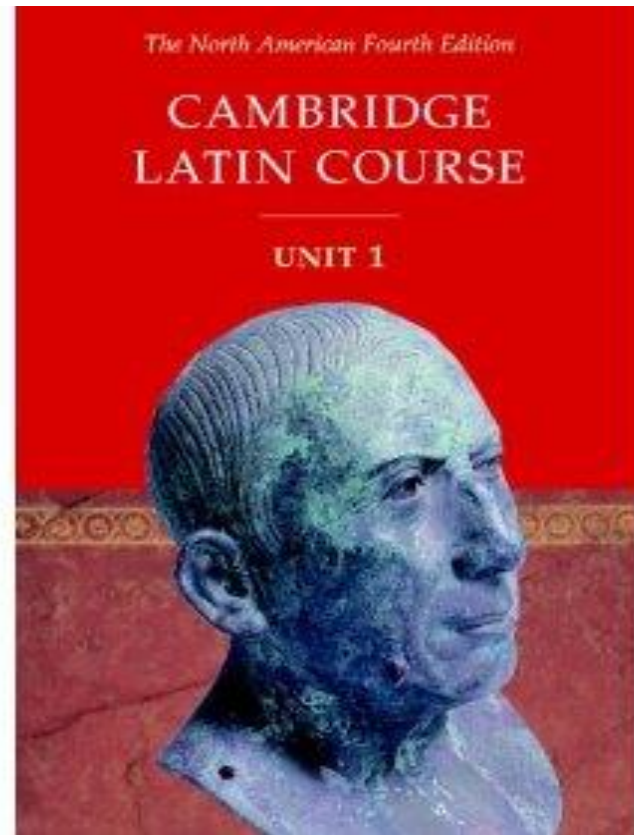


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LATIN I – WL121

COURSE DESCRIPTION

1. INTRODUCTION TO BASICS OF LATIN GRAMMAR, VOCABULARY AND READING USING CAMBRIDGE LATIN COURSE
2. DISCOVERIES IN DAILY ROMAN CULTURE INCLUDING GLADIATORS, RELIGION, HISTORY, DAILY LIFE IN POMPEII AND ERUPTION OF MT. VESUVIUS.



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LATIN I

- COURSE REQUIREMENTS

1. 15 – 30 MINUTES OF VOCABULARY AND GRAMMAR STUDY/PRACTICE EVERY NIGHT.
2. COMPLETION OF CULTURE ACTIVITIES ONCE/STAGE



LATIN I

WHY LATIN

1. GREATLY IMPROVES KNOWLEDGE OF ENGLISH GRAMMAR AND VOCABULARY
2. FAMILIARIZES STUDENTS WITH BASIS OF MODERN AMERICAN AND EUROPEAN CULTURES
3. MULTIPLE OPPORTUNITIES FOR EXTRA-CURRICULAR PARTICIPATION



LATIN II – WL221

- FULL YEAR WORLD LANGUAGE COURSE
- PREREQUISITES: SUCCESSFUL COMPLETION OF LATIN I OR PASSAGE OF ENTRANCE TEST
- CP I LEVEL



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LATIN II- WL221

COURSE DESCRIPTION

1. CONTINUING GRAMMAR AND VOCABULARY LEARNING FROM LATIN I USING CAMBRIDGE LATIN COURSE
2. CULTURE INCLUDES DAILY LIFE IN ROMAN BRITAIN AND EGYPT AS WELL AS MORE FOCUS ON ART, SCIENCE, HISTORY AND MYTHOLOGY.



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LATIN II

COURSE REQUIREMENTS

1. 15 – 30 MINUTES OF VOCABULARY AND GRAMMAR STUDY EVERY NIGHT.
2. COMPLETION OF CULTURE ACTIVITIES ONCE/STAGE



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WHY LATIN II

1. MOST COLLEGES HAVE A *DE FACTO* REQUIREMENT OF TWO YEARS OF FOREIGN LANGUAGE.
2. CONTINUES WHAT YOU'VE LEARNED IN LATIN I BY ADDING MORE APPLICATION AND ADVANCEMENT.
3. MORE OPPORTUNITIES FOR EXTRA-CURRICULAR PARTICIPATION



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LATIN III – WL323 (HON)
MAGISTER COMPTON

LATIN III – WL323 (HON)

COURSE DESCRIPTION

1. FULL YEAR WORLD LANGUAGE COURSE
2. PREREQUISITES: SUCCESSFUL COMPLETION OF LATIN II WITH A MINIMUM B AVERAGE.
3. HONORS LEVEL



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LATIN III – WL323 (HON)

COURSE DESCRIPTION

1. COMPLETION OF GRAMMAR STUDY WITH MORE COMPLEX FORMS, INCLUDING SUBJUNCTIVE.
2. CULTURE INCLUDES MORE FOCUS ON HISTORY AND THE CITY OF ROME ITSELF.
3. COURSE ENDS WITH READINGS EITHER FROM CAESAR'S *DE BELLO GALLICO* OR VERGIL'S *AENEID* IN LATIN AND ENGLISH.



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LATIN III

COURSE REQUIREMENTS

1. 15-30 MINUTES VOCABULARY AND GRAMMAR STUDY/NIGHT
2. COMPLETION OF CULTURE ACTIVITIES ONCE/STAGE AND BETWEEN STAGES
3. 30 MINUTES MINIMUM PREP WORK FOR DAILY IN-CLASS READINGS.
4. EMPEROR'S PROJECT COMPLETED OVER THE COURSE OF THE YEAR



WHY LATIN III

1. THIRD YEAR OF FOREIGN LANGUAGE A MAJOR COMPONENT OF A COMPETITIVE COLLEGE APPLICATION.
2. ADDITION OF READING ORIGINAL TEXTS COMPLETES PURPOSE OF STUDYING THE LANGUAGE.
3. MORE OPPORTUNITIES FOR EXTRA-CURRICULAR PARTICIPATION



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LATIN IV – WL414 (AP)
MAGISTER COMPTON

LATIN IV – WL424 (AP)

COURSE DESCRIPTION

1. FULL YEAR WORLD LANGUAGE COURSE
2. PREREQUISITES: SUCCESSFUL COMPLETION OF LATIN III WITH A MINIMUM B AVERAGE AND RECOMMENDATION FROM TEACHER.
3. ADVANCED PLACEMENT LEVEL

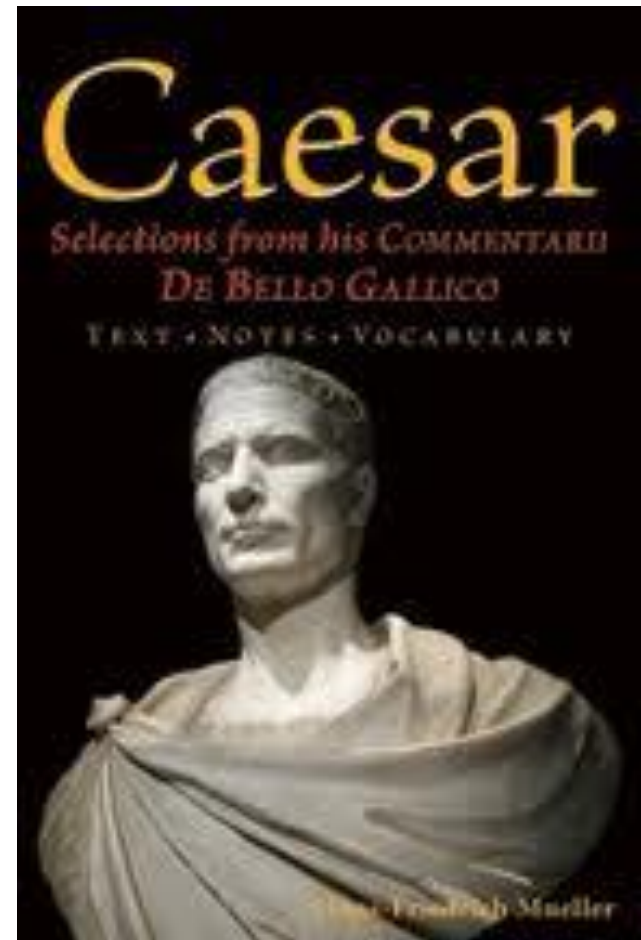


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LATIN IV – WL424 (AP)

COURSE DESCRIPTION

1. READING OF REQUIRED SYLLABUS FOR CAESAR'S *DE BELLO GALLICO* AND VERGIL'S *AENEID*
2. PREPARATION FOR AP EXAM WITH FOCUS ON ESSAY WRITING AND DISCUSSION OF RELEVANT TOPICS ACROSS TEXTS



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LATIN IV

COURSE REQUIREMENTS

1. READING PREPARATION NIGHTLY (30 MINUTES OR MORE)
2. MUST REVIEW GRAMMAR ON A REGULAR BASIS
3. FREQUENT ESSAY WRITING IN AND OUT OF CLASS
4. **MUST TAKE AP EXAM TO GET CREDIT!**

WHY LATIN IV

1. ADVANCED PLACEMENT LEVEL OFFERS STUDENTS OPPORTUNITY TO EARN COLLEGE CREDIT.
2. EXCELLENT ADDITION TO COLLEGE RESUME, AND COURSE PREPARES STUDENTS FOR COLLEGE-LEVEL WORK.
3. MORE OPPORTUNITIES FOR EXTRA-CURRICULAR PARTICIPATION



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GERMAN I, II, III, IV & AP

WL131, WL231, WL333 (HON), WL434 (AP)

Frau Zins-Adams

German

Course Information:

- ✦ World Languages
- ✦ Year long
- ✦ Levels 1, 2 (CP1), Levels 3, 4 (Honors), and AP
- ✦ Open Enrollment
- ✦ After level 1, a passing grade is required to progress to the next level
- ✦ No Application Process



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German

- ✦ Dual Enrollment available through the University of Cincinnati for students in levels 3 and 4. 10 college credits possible!
- ✦ Additional college credit can be earned through the *AP German Language & Culture* course for level 4 students. Signing Up for this course requires you to take the AP exam in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.



German I

Course Description: Students will explore the German language and culture in this course. While the main focus will be the language and culture of the people of Germany, students will compare the language and culture of other German-speaking countries to their own. Students will be exposed to the cultural products, perspectives and practices through songs, blogs, websites, emails, postcards, letters, advertisements, tables, videos, podcasts, etc.



German II

Course Description: This course is a continuation of first-year work with emphasis on further development of the basic skills. Speaking and listening continue to be primary objectives, but reading and writing are also stressed. Students continue to expand their understanding of German products, perspectives and practices related to the cultures of the German-speaking countries.



German III

Course Description: Students can receive dual credit for German 2001 from the University of Cincinnati.

In this course, students continue the development of speaking, listening comprehension, reading, and writing skills in this course. The lessons are conducted primarily in German. Emphasis is on more complex language structures and vocabulary development.



German IV/AP

Course Description: Students can receive dual credit for German 2002 from the University of Cincinnati.

The AP German Language course has been designed to prepare students for the AP exam. Curriculum focuses on the three communication modes: interpersonal, presentational and interpretive. This course is equivalent to the learning experience in a third-year college course in German language.



German

Academic Requirements:

- ✧ Quizzes, journal entries, speaking and written assignments, and tests will be assigned.
- ✧ Grades are entered daily. At the end of the quarter, students will typically have accumulated 250-400 points.
- ✧ Students are expected to demonstrate their progressing skills or mastery level of the language during each class period.
- ✧ Homework minimal, but good attendance highly recommended.



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German

Pacing & Instructional Goals:

- ✧ Typically students will complete 12 topics or units in the textbook, which are supplements with related handouts, which will be available through the *Dropbox* on *NetMoeller*.
- ✧ Students will write several entries in their composition book (*Tagebuch*), which stays in the classroom and serves as a portfolio for as long as they remain in the German program.
- ✧ Various Web 2.0 programs are used to enhance the student performance in the language. These include: *Kahoot*, *Google Voice*, *Wikispaces*, *Popplet*, *Glogster*, *Voki*, *Lingt*, *PollEverywhere*, etc.



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German

National German Exam

Exam results are among the criteria used in selecting the recipients of chapter awards and the national *AATG/PAD Study Trip Awards*, a four-week study trip program in Germany.



Delta Epsilon Phi ($\Delta E \Phi$)

German National Honor Society for High School Students of German recognizes the outstanding academic achievement of learners of German.



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Frau Zins-Adams

- ✦ Distinguished Alumna from the University of Cincinnati
- ✦ Federal Republic of Germany Friendship Award
- ✦ AATG/Goethe-Institut Certificate of Merit
- ✦ Award for Excellence in Foreign Language Instruction Using Technology with IALLT (K-12)
- ✦ 2008 World Language Teacher of the Year for Kentucky
- ✦ SCOLT Teacher of the Year in 2009
- ✦ 2014-2015 president of SCOLT (Southern Conference of Language Teaching)
- ✦ 2015 Outstanding German Educator Award from AATG



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Art and Photo Courses 2015-16

- **Digital Photography (AR341)**
- **Digital Photography II AP (AR434)**
- **Computer Graphics II AP (AR234)**



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Digital Photo 1

AR341

Mr. Gregory Stanforth

Digital Photo 1

Course Information:

1. Art/Photography Department
2. Year long course
3. CP-1 course
4. THE DIGITAL CAMERA - All students who sign up must have a properly working SLR type DIGITAL camera that has full manual controls - You must be able to operate the aperture and shutter speed in a manual / non-automatic mode. I have no preference for make or model of Camera. Telephoto, wide angle or other specialty lenses are not need



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Digital Photo 1

- Approximate cost for expendable course materials (this does not include cost of camera) like glossy photo quality inkjet paper and photo mounting materials is \$30.00 per month.
- INKJET PRINTER: All students must have access to a working color inkjet printer at home.
- Electronic flash will not be used for Photo 1 assignments.
- Moeller will provide Adobe Photoshop on school laptop for photo manipulations.



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Digital Photography 1

Course Description: Digital Photography 1, CP1 introduces the student to the basics of Digital photography techniques.

The student will learn to manipulate the manual controls of the camera, be instructed on the basics of aesthetics with an emphasis on the Elements and Principles of Art and Design. Students will also study the history of photography as an art form and the qualities of good photography through analysis and critiques. Class size is limited to 24.

Prerequisite: Entrance is determined by the Photography instructor, since class size is limited to 24 students. This class may be taken grades 9, 10, 11, or 12.



Digital Photo 1

Academic Requirements:

1. This is a “doing and making” class. You prove what you have learned by making a photo. Criteria for grading is clearly established for each assignment.
2. There are 12 assignments per year, 3 per quarter. Assignments are not a request, they are required. Students who are not willing to complete assignments on time should not take this class. All late and incomplete work receives a 0%.
3. Students will always have more than one week to complete assignments.
4. There is NO EXTRA CREDIT, except in unusual circumstances initiated by the instructor and only for students who have completed all work on time and according to directions.



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Digital Photo 1

- **CRITIQUES:** There will be no tests in the traditional sense. Test will be by critique. **ATTENDANCE IS REQUIRED FOR CRITIQUES** - Every student is required to participate in the critique sessions - they are the class tests and therefore no excuse other than a school sanctioned absence will be accepted. The class critique is an open forum where the instructor will not only make comments concerning technical and aesthetic problems and successes but will encourage the entire class to respond. Positive comments are most desirable because it is more valuable to learn from each other the good things that we have done as opposed to the negative. Likes and dislikes, although important, are only a small part of the class critique. All students will be encouraged to express their opinions which will be directed toward technique and aesthetics.



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Digital Photo 1

- **GRADING:** The basis of all work will be the Elements of Art and the Principles of Design: Works of art are graded based upon the student's effort, presentation, and time spent on the assignment. Grades are also determined by neatness, ability to follow directions, interpretation of the assignment, technique and quality of execution. Of all of these qualities other than time spent, creative risk taking - **TRYING SOMETHING DIFFERENT** - is the most desirable and will produce the best results.



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Digital Photo 1



Photo by Sam Effler Class of 2012



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Computer Graphics II- AP

AR234

Jacquelyn Sommer

Computer Graphics II- AP

Course Information:

1. Art/Photo Dept.
2. Year Long course
3. 10th, 11th, 12th grade students eligible
4. Pre Rec: Computer Graphics 1- 90% or higher for the year
5. Course is reserved for students that have fulfilled the pre rec.
6. Final Portfolio is required – 24 finished works of College level quality completed outside of class, in addition to the 12 major assignments assigned through the year.



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Computer Graphics II- AP

- Since this is an AP Course: Signing Up for this course requires you to take the AP exam (Portfolio Submission) in the Spring. Failure to do so, will forfeit your AP credit, and your weight on your transcript for the course.



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Computer Graphics II

- **Course Description:** Computer Graphics II-AP, CP1 continues the investigation into Digital Imaging with manipulation techniques in Photoshop through the use of Visual Communication and design principals. This course will provide the student with a continuing substantial foundation in using the computer for graphic design (effective image and type manipulation), print publication, logo, and advertising design. Class size is limited to 20.



Computer Graphics II

Academic Requirements:

1. HW- 6+ hours per week
2. 12 major assignments + a minimum of 24 works completed outside of class
3. The AP portfolio anticipates that a student will engage in a personal concentration or focus resulting in a portfolio that effectively demonstrates mastery of the Elements and Principals of Art and Design.



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Computer Graphics II-AP

- Why should the student take this course??
 - Student is enthusiastic about Design and has an interested in graphic design.
 - The potential to earn college credit while not necessarily focusing on attending an specific Art School.
- Students who successfully complete and submit an AP portfolio in sync with a College Level AP portfolio should anticipate that they will earn 1 college credit in addition to an Fine Arts Elective HS credit.



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Music Department

- **Vocal Ensemble HON (MU441)**
- **Men's Chorus 1, 2, 3, 4 (MU101/201/301/401)**



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Vocal Ensemble

MU441

Mr. Jim Balbach

Vocal Ensemble

Course Information:

1. Music Department
2. Year-long class
3. Honors course level
4. Juniors and Seniors are eligible.
5. Pre-requisites for the course:
 - a. Successful year in Sophomore Chorus (90% grade or better)
 - b. Formal Audition process
 - c. Personal invitation from the director
6. Application Process: contact Mr. Balbach



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Vocal Ensemble

Course Description: Vocal Ensemble is a year-long class, receiving a full credit. Music explored ranges from classical, pop, folk, religious, and secular. There is mandatory attendance for school liturgies, concerts, and various occasions where vocal music is required. Much more challenging, collegiate-level repertoire will be explored.



Vocal Ensemble

- A required yellow golf shirt must be purchased at the beginning of the school year; this is our uniform for casual occasions.
- More formal occasions will require black pants, a long-sleeved white shirt, and appropriate tie for the particular event.
- This course is a wonderful outlet for your own creative impulses, and serves as a nice way to express yourself from an artistic standpoint.



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Men's Chorus

MU101, MU201, MU301, MU401

Mr. Jim Balbach

Men's Chorus

Course Information:

1. Music Department
2. Year-long class.
3. CP 1 course level
4. All are eligible for enrollment.
5. No pre-requisites for the course: just a love of singing and enjoying a fraternal atmosphere along with team spirit.
6. Application Process: please contact Mr. Balbach



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Men's Chorus

Course Description: Men's Chorus is a year-long class, receiving a full credit. Music explored ranges from classical, pop, folk, religious, and secular. There is mandatory attendance for school liturgies, concerts, and various occasions where vocal music is required.



Men's Chorus

- A required yellow golf shirt must be purchased at the beginning of the school year; this is our uniform for casual occasions.
- More formal occasions will require black pants, a long-sleeved white shirt, and appropriate tie for the particular event.
- This course is a wonderful outlet for your own creative impulses, and serves as a nice way to express yourself from an artistic standpoint.



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Physical Education Courses

- **Recreation Fitness for Life 1-2 CP1
(PH441/451)**



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Recreational Fitness For Life

PH441/451

John Rodenberg

Recreational Fitness For Life

Course Information:

1. Health and Physical Education
2. Semester
3. 441/451
4. Juniors/Seniors
5. PE1/2
6. Approval by Department and Teacher



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Recreational Fitness for Life

- This course is a continuation of team and individual sports introduced in Physical Education 1 and 2 along with the combination of Recreational and Fitness activities. The course will cover the healthful benefits of sports and other recreational activities. Units which may be featured include: air force football, badminton, basketball, bocce ball, corn hole, golf, low organizational games, pickle ball, putt-putt golf, soccer, speedball, team handball, tennis, volleyball, and weight training. The teacher is the one that determines which activities will be covered during the semester. The fitness components will focus on learning how to stay fit for one's entire life. The course encompasses cardiovascular fitness as well as physical fitness. Different types of strength training and conditioning will be emphasized.



Recreational Fitness for Life

Academic Requirements:

1. Attendance and participation



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