FLORIDA ATLANTIC UNIVERSITY

COURSE CHANGE REQUEST
Undergraduate Programs

Department Chemistry and Biochemistry

College Science

UUPC Approval 2/26/24
UFS Approval _____
SCNS Submittal _____
Confirmed _____
Banner Posted _____
Catalog _____

***Current* Course Prefix and Number**	***Current* Course Title**
CHM 1020C	Contemporary Chemical Issues

*Syllabus must be attached for **ANY** changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.*

Change title to:

Change prefix

From: **To:**

Change course number

From: **To:**

Change credits*

From: **To:**

Change grading

From: **To:**

Change WAC/Gordon Rule status**

Add ☐ **Remove** ☐

Change General Education Requirements***

Add ☐ **Remove** ☐

*See Definition of a Credit Hour.

**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See WAC Guidelines.

***GE criteria must be indicated in syllabus and approval attached to this form. See Intellectual Foundations Guidelines.

Change description to:

This course provides students with an introduction to chemical principles and applications for the nonscience major. Students will engage in problem solving and critical thinking while applying chemical concepts. Topics will include the scientific method of problem solving, classification of matter, atomic theory, the periodic table, gases, chemical reactions, energy, and chemical bonds.

Change prerequisites/minimum grades to:

Change corequisites to:

Change registration controls to:

Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).

Effective Term/Year for Changes: Fall 2024

Terminate course? Effective Term/Year for Termination:

Faculty Contact/Email/Phone Tito Sempertegui / TSEMPERT@fau.edu / 7-2508

Approved by	***Date***
Department Chair: Andrew Tepenitis.	1/26/24
College Curriculum Chair:	01/26/24
College Dean:	2/1/24
UUPC Chair: Korey Sorge	2/26/24
Undergraduate Studies Dean: Dan Macaroff	2/26/24
UFS President:	
Provost:	

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

CHM 1020C Contemporary Chemical Issues (3 cr).

Spring Syllabus 2024

In Person course – CRN# 10731 CHM 1020C-001

Professor: Patrick Ande
Office: 214 Physical Science Bldg.
Contact info.: pande@fau.edu 561-297-2612 off.
Office Hrs: Please see canvas for current semester.

TA: Tamara Damjanovic
Contact info: tdamjanovic2021@fau.edu

Suggested Pre or Co-requisite: MAC 1105 College Algebra, working knowledge of canvas.

Computer Requirements:

- Operating System
  - A computer that can run Mac OSX or Win XP or higher
- Peripherals
  - A backup option should be available to minimize the loss of work. This can be an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.
- Software
  - Please visit the Students tab in Canvas located at the top of each canvas page for LMS compatibility with your computer. Make sure your Internet browser is compatible and that you have all the recommended plug-ins installed.
  - Other software may be required for specific learning units and/or modules, but the links to download and install it will be provided within the applicable unit and/or module. You may also need headphones with a microphone for Canvas Collaborate sessions, web camera or skype.

Required Technical Skills

The following skills below should be adjusted per the needs and requirements of your course. For example, students in an Art course might need to know Photoshop skills and manipulating pictures or in a stats course students will need to know functions in SPSS software. These are skills that they should have come to the class with not the skills they will learn while in the class.

To be successful in this course you should be familiar with and be able to execute the following technological skills:

- *Creating and posting to a discussion board, blog, or Wiki*
- *Taking a test through Canvas*
- *Attaching documents*
- *Copy and paste functions*
- *Microsoft Office tools: Word, PowerPoint, Excel*
- *Searching the FAU library and websites*

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Course Delivery mode: This is a fully in person course accessible only through FAU's learning management system—Canvas. You must log into Canvas with your FAU ID and Password to access the materials and assignments in this course. If you do not know your FAU ID or Password click the following link for help. http://www.fau.edu/oit/accounts/index.php

The course is organized into weekly units with dates provided for each unit. The course begins with a START HERE unit that will familiarize you with the organization and navigation of the course. Each week you will open a new unit to access the reading materials, PowerPoints, and other materials relevant to the week's topic, your assignments for each week will be listed within the unit.

Required Material:

1) Text book: Chemistry in Context 10th edition : Fahlman; Purvis-Roberts , et al. McGraw Hill search for ISBN # for online or physical book or FAU bookstore.

a) **AMERICAN CHEMICAL SOCIETY CNCT 3P IA OLA 1S CHEM CONTXT 10 2021 9781260983890**

2) LAB Book Contemporary Chemical Issues labs ISBN# 979-8-7657-4418-5

3) Scientific Calculator

Course Objectives/Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Students will be able to distinguish between physical and chemical properties and changes.
2. Students will recognize components of gaseous chemistry.
3. Students will recognize components of aqueous chemistry including properties of water, solutions, and acids and bases
4. Students will correlate the design of the periodic table to periodic trends and physical and chemical properties of the elements.
5. Students will write and interpret chemical formula and write balance chemical equations.

Assessments for this course include: You will be expected to take 4 exams and (maybe a final) and do 9 labs. There are four (4) 50 minute exams, , 9 lab experiments, and 9 HW problems and 9 quizzes. There is a discussion board for help and questions about class.

Your final course grade will be determined using the formula below:
Assignment points % of Course Grade

Exams 1,2,3, 4, Multiple choice	100 each	(400) 60%
HW 9	10 each	(90)
Labs 9	10 each	(90)

Quizzes 9	10 each	(90)
Total Points		(670) 100%

Grading: (FAU Student Education GRADING SCALE): Activity scores are cumulative and the grade scale represents percentage of total points earned.

A = 93-100 A- = 90-92 B+= 87-89 B = 83-86 B-= 80-82 C+= 77-79 C = 73-76 C-= 70-72 D+= 67-69 D = 63-66 D-= 60-62 F = Below 60

Course Flow of Content 2024

UNITS	DATES	TOPIC	READ/LISTEN/VIEW	TO DO
START HERE	mm.dd – mm.dd	Introduction to Course	Syllabus Course Schedule	• Post student intro
1	1/8-1/19	Intro to Chemistry and Measurement, Density, Equalities and Conversion factors. Periodic table	Read Chapter 1 Powerpoint	• Lab # 1
2	1/19-1/29	Atoms , molecules, Symbols and Formulas - AIR	Read Chapter 2 Powerpoint	• Lab #2 •
3	1/29-2/9	Radiation and ozone layers - UV Lewis Dot	Read Chapter 3 Powerpoint	• Exam 1 (1/31) • Lab #3 •
4	2/9 – 2/19	Molecules and Moles	Read Chapter 4 Powerpoint	• Lab # 4 •
5	2/19-2/28	Water ; acid and bases and pH	Read Chapter 5 Powerpoint	• Exam 2 (2/21) • Lab #5
	3/4-3/8	Spring break		
6	3/11 – 3/18	Energy and chemical reactions	Chapter 6	• Lab #6
7	3/18 – 3/25	Energy and Nuclear Reactions	Read Ch, 7 Powerpoint	• Lab #7
8	4/1 -4/8	polymers	Read Chapter 9 Powerpoint	• Exam 3 (3/27) • Lab #8
9	4/15-4/22	Genetics and DNA	Read ch 13	• Lab #9 Exam 4 (4/26)

Attendance: Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Testing Policy: Tests will be given in the classrooms assigned at the time of the test. Canvas is an online educational program that ALL students enrolled in this class have free access to. All you need to do is go to http://canvas.fau.edu and follow procedures to create a LOGIN. All PowerPoint presentations, grades, syllabus, lecture notes, assignments, and announcements pertinent to this class can be found on canvas. All exams will be 60 minutes in length and will be given in the class room assigned. Any student who fails to take the exam will receive a grade of zero for that exam unless there is documented and acceptable justification. Students who fall under this prior condition must notify me BEFORE THE EXAM and turn in documentation within 24 hours of the day of the exam week (doctor's note or other documentation)

Exam identification: On all exams in the exam rooms, proctors will be present and students are to identify themselves by presenting student ID cards or a photo ID that clearly shows your name and address and a Z #. This will be required on the test scantron in order for the test to be scored.

Make-up exam policy: A make up exam will be given only if the student can provide a WRITTEN VERIFIABLE EXCUSE FOR THEIR ABSENCE.If you are ill or have some other valid excuse for missing the exam, you must email me. This email information does not excuse you from the test; it simply informs me that you were absent. A written verifiable excuse (with telephone # for verbal verification) is needed from a PROFESSIONAL upon your return, no later than one week after the test.

Missed labs: Labs go on line Monday morning at 8:00 and shut off on Friday at 11:59. You will need to take them sometime during this period.

Studying and Time commitment: Plan to spend a minimum of 8 - 10 hours per week studying and interacting for this course. Students who do not study consistently are usually not successful in chemistry.

Technical Resolution Policy: In the online environment, there is always a possibility of technical issues (e.g. lost connection,hardware or software failure). Many of these can be resolved relatively quickly, but if you wait till the last minute before due dates, and the chances of these glitches affecting your success are greatly increased. Please plan appropriately. If a problem occurs, it is essential you take immediate action to document the issue so that your instructor can verify and take appropriate action to resolve the problem.

Please take the following steps when a problem occurs:

1) Contact the eSuccess Advisor, Eduardo Santiago for assistance
   Edwardo Santiago - eLearning Success Advisor - 561-297-3590 or esantia5@fau.edu
2) If you can, make a Print Screen of the monitor when the problem occurs. Save the Print Screen as a .jpg file. If you are unfamiliar with creating a Print Screen file, visit http://en.kioskea.net/faq/141-print-screen-screen-capture-windows-mac-os-x-and-unix-linux.

3) Complete a help desk ticket at http://www.fau.edu/helpdesk. MAke sure you compelete the form entirely and give a full description of the problem so the help desk staff will have the pertinent information in order to assist you properly. This includes:
    a. Select "Canvas (Faculty)" for the Ticket Type.
    b. Input the Course ID.
    c. In th eSummary/Additional Details section, include your operating system, internet browser, and internet service provider (ISP).
    d. Attach the Print Screen file, if available.
4) Send a message within Canvas to your instructor to notify him/her of the problem. Include all pertinent information of the incident (2b-d above).
5) If you do not have access to Canvas, send an email to your instructor with all pertinent information of the incident (2b-d above).
6) If you do not have access to a computer, call your instructor with all pertinent information of the incident. If he/she is not available, make sure you leave a detailed message.
7) If you do not hear back from the Help Desk or your instructor within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until a resolution is obtained.

Communication Policy

- **Announcements**
    - You are responsible for reading all anouncements posted by the instructor. Check the anouncements each time you login.

- **Course-related questions**
    - Post course-related questions to the FAQ discussion board. Asking course-related questions in this way allows other participants with the same question to benefit from the responses. Also, make sure you review this forum prior to posting a question; it may have already been asked and answered in previous posts. Except Saturdays, Sundays, and holidays, questions will, generally, be answered by instructors within 48 hours.

- **Email Policy**
    - Messages in the LMS are the preferred method to contact your instructor. Such messages should only be used to communicate personal or confidential matters; otherwise, please yse the Questions/Concerns discussion board within the course.

Selected University and College Policies

Support Services and Resources

Office of Information Technology Online Help Desk:	http://helpdesk.fau.edu
eLearning Student Success Advisor- Eduardo Santiago	esantia5@fau.edu
FAU Ombuds (Ask a question about University related issues)	Twitter @FAUOmbuds ombuds@fau.edu
Academic Advising Services:	http://www.fau.edu/freshmanadvising
FAU Libraries Website:	http://www.fau.edu/library
Center for Learning and Student Success Website:	http://www.fau.edu/class
University Center for Excellence in Writing:	http://www.fau.edu/UCEW
Math Learning Center:	http://www.math.fau.edu/MLC
Office of Undergraduate Research and Inquiry:	http://www.fau.edu/ouri
Office for Students with Disabilities Website:	http://osd.fau.edu/
Office of International Programs and Study-abroad:	www.fau.edu/goabroad

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau.edu/counseling/

Disability Policy Statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/.

Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Plagiarism is unacceptable in the University community. Academic work that is submitted by students is assumed to be the result of their own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass-off such work as one's own. Any student who fails to give full credit for ideas or materials taken from another has plagiarized. This includes all discussion board posts, journal entries, wikis, and other written and oral presentation assignments. If in doubt, cite your source!

Religious Accommodation Policy Statement

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments. For further information, please see Academic Policies and Regulations.

University Approved Absence Policy Statement

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

Incomplete Grade Policy Statement

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete ("I") grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing ("F") grade.

Withdrawals

Any student who decides to drop is responsible for completing the proper paper work required to withdraw from the course.

Grade Appeal Process

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:

- There was a computational or recording error in the grading.
- Non-academic criteria were applied in the grading process.
- There was a gross violation of the instructor's own grading system.
- The procedures for a grade appeal may be found in Chapter 4 of the University Regulations.

Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as *"... activities which interfere with the educational mission within classroom."* Students who behave in the face-to-face and/or virtual classroom such that the educational experiences of other students and/or the instructor's course objectives are disrupted are subject to disciplinary action. Such behavior impedes students' ability to learn or an instructor's ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor's expectations for classroom conduct.

Faculty Rights and Responsibilities

Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:

- To establish and implement academic standards
- To establish and enforce reasonable behavior standards in each class
- To refer disciplinary action to those students whose behavior may be judged to be disruptive under the *Student Code of Conduct*.

Instructor reserves the right to adjust this syllabus as necessary.

Science and Natural World Syllabus Description

Intellectual Foundation (General Education) Program Outcomes.

Scientific principles are behind what we find in nature and in natural occurrences. Scientific issues, such as those dealing with stem-cell research, cloning and global warming, are hotly debated by policy makers. Courses that meet this requirement share the goal of seeking to understand patterns and principles behind phenomena and occurrences, both in the inorganic world and in the living world. They typically fall within either the physical sciences (astronomy, physics, chemistry, and the earth sciences) or the biological sciences.

Students who satisfy the Science and the Natural World requirement will be able to:

- Explain important scientific concepts, principles, and paradigms.
- Explain how principles of scientific inquiry and ethical standards are used to develop and investigate research questions.
- Explain the limits of scientific knowledge and of how scientific knowledge changes.
- Critically evaluate scientific claims, arguments, and methodology.

After completion of the associated lab, the student will be able to:

- Demonstrate and explain how experiments are conducted.
- Analyze resulting data and draw appropriate conclusions from such data.