ENC 3464 Writing in the Social Sciences

(this class confers Composition (C) and WR 6,000 credit)

SECTION: **11807**   **CLASS MEETING DAYS/TIMES: T/TH – 5-6, 6TH**

INSTRUCTOR: Yukai Chen   **EMAIL:**   **OFFICE HOURS: T, 4TH**

COURSE DESCRIPTION

Good writing and good social science go hand in hand, so this course stresses the relationship between clear, simple prose and thoughtful social analysis. By conducting original research, students learn to effectively use basic skills, such as sentence and paragraph construction, as well as advanced aspects of synthesis, style, data analysis, and report organization. We will examine various writing strategies appropriate for specific tasks and audiences in the discipline. Reviews of literature, field work, and quantitative research will be put into practice in workshops that emphasize the exchange of ideas and the process of planning, drafting, and revising original research.

GENERAL EDUCATION LEARNING OUTCOMES FOR DISCIPLINE-SPECIFIC WRITING CLASSES

Content: Students demonstrate competence in the terminology, concepts, theories, and methodologies used within the discipline.

Communication: Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline.

Critical Thinking: Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.

GE SLOs will be assessed in several ways. Content knowledge will be assessed primarily through writing assignments in which students demonstrate understanding of their field. Communication will be assessed through major writing assignments and engagement in public speaking, for which students are required to convey their knowledge and ideas clearly through collaborative in-class discussions and presentations to various audiences. Critical thinking will be assessed through students' abilities to select appropriate information and document design when writing and speaking to various stakeholders, including colleagues and the public.

General Education Objectives: Composition (C)

This course confers General Education credit for Composition (C). Composition courses provide instruction in the methods and conventions of standard written English (i.e. grammar, punctuation, usage) and the techniques that produce effective texts. Composition courses are writing intensive, require multiple drafts submitted to the instructor for feedback prior to final submission, and fulfill 6,000 of the university's 24,000-word writing requirement. Course content must include multiple forms of effective writing, different writing styles, approaches and formats, and methods to adapt writing to different audiences, purposes and contexts. Students are expected learn to organize complex arguments in writing using thesis statements, claims and evidence, and to analyze writing for errors in logic. (See the General Education Objectives.)

In **ENC 3464, Writing in the Social Sciences**, these objectives are met in a variety of ways. Students begin by learning to read professional publications and to use them to write a short text. The remainder of the semester, students engage in an individual research project for which they design and administer a methodology suitable for class-based research. At each stage of the research process, students write sections of a research paper, demonstrating their ability to claims about their question in an appropriately styled report with required visual elements. Finally, students present their research at a multi-class poster session, thereby practicing oral presentation with a public audience.

Earning Credit for General Education Outcomes and Objectives: (C) and (WR)

Composition Credit: Students must pass this course with a "C" or better to satisfy the UF requirement for Composition (C).

University Writing Requirement: The University Writing Requirement (WR) ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. Course grades have two components. To receive University Writing Requirement (WR) credit (E6), a student must earn a course grade of C or higher **and** assignments must meet minimum word requirements totaling at least 6000 words. Thus, to earn WR-E6 credit, **students must complete all the major writing assignments**.

The instructor will evaluate and provide feedback on the student's written assignments with respect to content, organization and coherence, argument and support, style, clarity, grammar, punctuation, and mechanics. Conferring credit for the University Writing Requirement, this course requires that papers conform to the general assessment rubric (see below). More specific rubrics and guidelines applicable to individual assignments may be delivered during the course of the semester.

STUDENT LEARNING OUTCOMES FOR ENC 3464

In ENC 3464, students will learn to

Content
- Describe the social sciences analytical perspective
- Recognize genres of academic publication
- Conduct discipline-specific research

Critical Thinking
- Evaluate material sources for credibility as research sources
- Analyze academic publications for project-specific information
- Develop discipline-specific research questions

Communication
- Write social sciences research reports suitable for publication
- Present social sciences research to a mixed audience
- Create materials for professional advancement

REQUIRED TEXTS

There is no textbook for this class. Readings, including published scholarly research, will be assigned by the instructor and made available online or via reserved readings at the Library.

Assignment Descriptions (Total Points Possible: 1000)

Synthesis Paper (500 words; 50 points + 40 points for summaries)
Students will synthesize 4 papers into a brief review paper for the purpose of learning how to read and analyze the social sciences literature. Four paper summaries are also part of the work.

Proposal (300-600 words; 50 points)
In a short proposal statement, students learn to frame a research question, describe a subject group and methodology, and explain the significance of the issue.

Annotated Bibliography (600-1000 words; 100 points)
In this assignment, students will locate and analyze the literature associated with the proposed research project. The goal of the literature review is to provide the context for the research by finding out what other scholars say on the same subject.

Research Report (4000-6000 words; 500 points)
For the research report, students will choose either a qualitative or quantitative research project, examine the existing literature, collect original data, present findings, and draw conclusions on a real-world subject. This paper is written in parts over the course of the entire semester.

Application Materials (750-1000 words; 100 points)
Students prepare a résumé and a personal statement or letter of application appropriate for graduate school or an internship.

Poster Presentation (100 points)
Students learn to construct a professional poster and to present the poster at a local exhibit or conference.

In-class Work and Homework (900 words; 60 points)
Throughout the term, students will work in class and at home on activities that strengthen specific writing skills. These activities include quizzes, drafts, workshops, peer reviews, and reading responses. For peer reviews, a complete paper must be submitted; missed peer reviews will lower the final grade on the paper by 20%. Field notes and reading responses, which will be graded and marked for content, organization and coherence, argument and support, style, clarity, grammar, punctuation, and mechanics, will total 900 words or more.

Grading Scale
The University Writing Program uses the UF recommended grading scale.

A	100 %	to 94.0%
A-	< 94.0 %	to 90.0%
B+	< 90.0 %	to 87.0%
B	< 87.0 %	to 84.0%
B-	< 84.0 %	to 80.0%

C+	< 80.0 %	to 77.0%
C	< 77.0 %	to 74.0%
C-	< 74.0 %	to 70.0%
D+	< 70.0 %	to 67.0%
D	< 67.0 %	to 64.0%
D-	< 64.0 %	to 60.0%
F	< 60.0 %	to 0.0%

General Education Credit

- **University Writing Requirement**: The University Writing Requirement (WR) ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning. Course grades now have two components. To receive University Writing Requirement (WR) credit (E6), a student must earn a course grade of C or higher **and** assignments must meet minimum word requirements totaling at least 6000 words. Thus, to earn WR-E6 credit, students must complete all the major writing assignments and meet minimum word counts.
- **Composition Credit**: Composition courses provide instruction in the methods and conventions of standard written English (i.e. grammar, punctuation, usage) and the techniques that produce effective texts. Composition courses are writing intensive, require multiple drafts submitted to the instructor for feedback prior to final submission, and fulfill 6,000 of the university's 24,000-word writing requirement. Course content must include multiple forms of effective writing, different writing styles, approaches and formats, and methods to adapt writing to different audiences, purposes and contexts. Students are expected learn to organize complex arguments in writing using thesis statements, claims and evidence, and to analyze writing for errors in logic.

General Education Rubric

The instructor will evaluate and provide feedback on the student's written assignments with respect to content, organization and coherence, argument and support, style, clarity, grammar, punctuation, and mechanics. Conferring credit for the University Writing Requirement, this course requires that papers conform to the following assessment rubric. More specific rubrics and guidelines applicable to individual assignments will be delivered during the course of the semester.

	SATISFACTORY (Y)	UNSATISFACTORY (N)
CONTENT	Papers exhibit at least some evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	Papers either include a central idea(s) that is unclear or off- topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources.

ORGANIZATION AND COHERENCE	Documents and paragraphs exhibit at least some identifiable structure for topics, including a clear thesis statement but may require readers to work to follow progression of ideas.	Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader.
ARGUMENT AND SUPPORT	Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the Satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments.	Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis.
STYLE	Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical sentence structure. At a minimum, documents will display a less precise use of vocabulary and an uneven use of sentence structure or a writing style that occasionally veers away from word choice or tone appropriate to the context, genre, and discipline.	Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly.
MECHANICS	Papers will feature correct or error-free presentation of ideas. At the weak end of the Satisfactory range, papers may contain some spelling, punctuation, or grammatical errors that remain unobtrusive so they do not muddy the paper's argument or points.	Papers contain so many mechanical or grammatical errors that they impede the reader's understanding or severely undermine the writer's credibility.

Policies and Procedures

Attendance

Attendance is required. The policy of the University Writing Program is that if students miss more than **six periods** during the term, they will fail the entire course. Double periods count as two absences.

The UWP exempts from this policy **only** those absences due to university-sponsored events, such as athletics and band, religious holidays, quarantine, illness, or serious family emergencies. Absences related to university-sponsored events must be discussed with the instructor **prior** to the date that will be missed. For absences due to quarantine or illness, your instructor may require a signed doctor's note.

Requirements for class attendance, make-up exams, assignments, and other work in this class are consistent with university policies that can be found at
https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Please note: If students are absent, it is their responsibility to make themselves aware of all due dates. If absent due to a scheduled event, students are still responsible for turning assignments in on time.

Tardiness: If students enter class after roll has been taken, they are late, which disrupts the entire class. Two instances of tardiness count as one absence. This applies to both in-person and synchronous Zoom classes. When attending a Zoom class, make sure you join the class early enough to correct any technological issues you encounter. Make sure to mute your microphone upon entry.

Class Recording Policy

The State of Florida has passed a law regarding the recording of classes by students.

- A Student may record a **class lecture** for three specified purposes as outlined in House Bill 233/Section 1004.097, Florida Statutes:

  1. For the student's own personal educational use;
  2. In connection with a complaint to the University where the recording is made
  3. As evidence in, or in preparation for, a criminal or civil proceeding.

- Students may audio or video record a class lecture for a class in which the student is enrolled. Students do not need advance permission, or to provide notice, to record.

- A class lecture is defined as an educational presentation delivered by faculty (instructor of record) or guest lecturer, as part of a University of Florida course, intended to inform or teach enrolled students about a particular subject. Lecture is inclusive of faculty-led discussions that are integrated into the educational presentation.

- A class lecture **does not** include lab sessions, student presentations, clinical presentations such as patient history, **academic exercises involving student participation**, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

- A recording of a class lecture may not be published without the consent of the lecturer.

  - **Publish** is defined as sharing, transmitting, circulating, distributing, or providing access to a Recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section.

  - A recording, or transcript of the recording, is considered to be published if it is posted on or uploaded to, in whole or part, any media platform, including but not limited to social media, book, magazine, newspaper or leaflet.

- A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Classroom Demeanor

Please keep in mind that students come from diverse cultural, economic, and ethnic backgrounds. Some of the texts we will discuss and write may engage controversial topics and opinions. Diversified student backgrounds combined with provocative texts require that you demonstrate respect for ideas that may differ from your own. Disrespectful behavior will result in dismissal, and accordingly absence, from the class.

If attending class via Zoom, there are a few guidelines we expect you to follow.

- Avoid distractions during class time. Close unnecessary apps and put your phone away. Attend

from an area with no distractions. (If circumstances require you to work from an area with distractions, let your instructor know. For example, if you have to share a room with family, let your teacher know that your mom might be walking in the background or your brother is doing his class at the dining room table at the same time.)

- Make sure that whatever is visible (your attire, the background) is reasonable for class. Would you wear it to class? Would you show that poster in class? Would you bring that pile of dirty clothes to class?

- Zoom requirements: During class, you are expected to be visible to the instructor and be able to communicate with the instructor by audio or writing in the chat box.

    o **You will need a web cam and microphone for Zoom class. If you work in a noisy or distracting environment, we strongly recommend headphones with a microphone.**

In-Class Work

Active participation is a crucial part of success in this class. Students will be expected to work in small groups and participate in group discussions, writing workshops, peer reviews, and other in-class activities. Be prepared for unannounced quizzes or activities on the readings or classroom discussion. In general, students are expected to contribute constructively to each class session.

Paper Maintenance Responsibilities

Students are responsible for maintaining copies of all work submitted in this course and retaining all returned, graded work until the semester is over. Should the need arise for a resubmission of papers or a review of graded papers, it is the student's responsibility to have and to make available this material.

Submission Requirements

All papers will be submitted as **MS Word (.doc, .docx) documents** to Canvas. Sometimes, pdfs will be accepted, too. Final drafts should be polished and presented in a professional manner. Because professional communication varies in document design, all papers will have specific formatting guidelines to follow. Please read these carefully and ask questions early to avoid losing points.

Papers and drafts are due online at the assigned day and time. Late papers will not be accepted. Failure of technology is not an excuse. If illness or injury prevents a student from turning in a paper on time, the student should consult with the writing coach to turn in the work as soon as is feasible given the situation.

ACADEMIC HONESTY and PLAGIARISM

As a University of Florida student, your performance is governed by the UF Student Honor Code, (https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx). The Honor Code requires Florida students to neither give nor receive unauthorized aid in completing all assignments. Violations include cheating, plagiarism, bribery, and misrepresentation, all defined in detail at the above site.

Plagiarism is a serious violation of the Student Honor Code. The Honor Code prohibits and defines plagiarism as follows:

Plagiarism. A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

1. Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.

2. Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student.

(University of Florida, Student Honor Code, 8, October, 2013)

The University Writing Program takes plagiarism very seriously, and treats instances of plagiarism as dishonesty and as a failure to comply with the scholarly requirements of this course. You commit plagiarism when you present the ideas or words of someone else as your own. Each student's work may be tested for its originality against a wide variety of databases by anti-plagiarism sites to which the University subscribes, and negative reports from such sites may constitute proof of plagiarism. Some (but not all!) examples of plagiarism are copying-and-pasting anything from the Internet without proper quotations and attributive tags, using work you have turned in to other classes without permission from the instructor, and insufficient paraphrasing.

If you commit academic dishonesty, you will receive a zero for the assignment, and the instructor will submit the incident to the Dean of Students Office as an Honor Code violation. Punishments can vary, but the instructor will recommend failing the course. (If you commit plagiarism in the workplace, at the very least you will be reprimanded. You could also be fired or even lose your career.)

Important tip: There should never be a time when you copy and paste something from the Internet and don't provide the exact location and citation information for the source.

All students are required to abide by the Academic Honesty Guidelines which have been accepted by the University. The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity. UF students are bound by The Honor Pledge which states: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor in this class. Honor Code: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/ (Links to an external site.)Links to an external site.

If a student plagiarizes all or any part of any assignment, I will award a failing grade on the assignment, and I will report you to the honor board at the Office of the Dean of Students. Once a student is reported to the honor board, he/she cannot drop the course. Your work will be tested for its "originality" against a wide variety of databases by anti-plagiarism guardian sites to which the university subscribes, and negative reports from such sites constitute PROOF of plagiarism. Other forms of academic dishonesty will also result in a failing grade on the assignment as a minimum penalty.

Examples include cutting and pasting a BLOG entry or citing phony sources/quotations to include in your assignments. You are responsible for understanding the University's definitions of plagiarism and academic dishonesty, which include the following:

- Submitting all or part of someone else's work as if it is your own
- "Borrowing" all or portions of anything (books, song lyrics, poetry, movie scripts) without crediting the source
- "Borrowing" verbatim text without enclosing in quotation marks and citing source

As a general rule, anytime you cut and paste you are citing a source. If you do any cutting and pasting without giving credit to that source, you are committing plagiarism. For more information about academic honesty, including definitions and examples of plagiarism, see: Making "duplicate submissions" of assignments - that is, submitting work in one class that you also submit in another class (UNLESS you have permission of both instructors in advance and IN WRITING.) "Collaborating" or receiving substantive help in writing your assignment unless such collaboration is part of the given assignment also constitutes plagiarism. However, you may receive general advice from tutors or UF writing lab instructors and you may form study groups among your classmates to study for the exams.

For more information, see the Student Conduct and Conflict Resolution Web site: https://www.dso.ufl.edu/sccr or call 352-392-1261 x207.

As a University of Florida student, your performance is governed by the UF Student Honor Code, (https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx. The Honor Code requires Florida students to neither give nor receive unauthorized aid in completing all assignments. Violations include cheating, plagiarism, bribery, and misrepresentation, all defined in detail at the above site.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/

NOTIFICATION LETTER FROM THE DEAN OF STUDENTS' OFFICE

Students who experience a family or personal emergency (death in the family, unplanned hospitalization, etc.) may contact the Dean of Students Office and request notification letters be sent to their professors. Students are required to provide faculty members with appropriate documentation to support their absence unless, due to the nature of the issue, the information is provided to and verified by the Dean of Students' Office.

The University of Florida complies with the Americans with Disabilities Act. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation.

Students in Distress

For guidance during distressing situations, please contact U Matter We Care or the Dean of Students Office. They can help students navigate resources and academic procedures for personal, medical, and academic issues.

- U Matter We Care: http://umatter.ufl.edu, umatter@ufl.edu, 352-294-2273 (CARE)Dean of Students: https://dso.ufl.edu/, 202 Peabody Hall, (352) 392-1261
- Counseling and Wellness Center: https://counseling.ufl.edu/, 3190 Radio Road, (352) 392-1575
- Field and Fork Pantry: https://fieldandfork.ufl.edu/, located near McCarty B, 352-294-2208
- Student Health Care Center: http://shcc.ufl.edu/, multiple locations, (352) 392-1161
- Aid-a-Gator: https://www.sfa.ufl.edu/aidagator/, S-107 Criser Hall, (352) 392-1275

Academic Resources

- *E-learning technical support*: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.
- *Career Connections Center*: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- *Library Support*: Various ways to receive assistance with respect to using the libraries or finding resources.
- *Teaching Center*: Broward Hall, 352-392-2010 or to make an appointment 352-392-6420. General study skills and tutoring.
- *Writing Studio:* 2215 Turlington Hall*, 352-846-1138. Help brainstorming, formatting, and writing papers. Online only for Fall 2020.
- *Student Complaints On-Campus*: Visit the Student Honor Code and Student Conduct Code webpage for more information.
- *On-Line Students Complaints*: View the Distance Learning Student Complaint Process.

Notes and Questions:

Schedule of Classes and Assignments

Unit 1: The Rhetoric of Scientific Writing

Week 1 – Course Introduction (Jan 13 – Jan 17)

- Readings
    - Charles, C. C. & Haupt, J. (2020). Writing for Academic Audiences. In C. C. Charles (Ed.), *Writing in the Social Sciences*. EdTech Books. https://edtechbooks.org/writing/academic
- Activities
    - Video activity: think like a social scientist
    - Hidden Brain Podcast: applying social science research

Week 2 – Reading Science (Jan 20 – Jan 24; Monday is a holiday)

- Readings -- none
- Activities
    - Synthesis Series Articles, Instructor Choice
    - Bullet Notes 1, 2

Week 3 – Synthesizing Scientific Literature (Jan 27 – Jan 31)

- Readings -- none
- Activities/Assignments
    - The Synthesis Matrix
    - Bullet Notes 3, 4

Week 4 – Devising a Research Question / A First Look at Research Design (Feb 3 – Feb7)

- Readings -- none
- Activities/Assignments
    - The Synthesis Ppaer

Unit 2: Library Research and Research Methods

Week 5 – Devising a Research Question / A First Look at Research Design (Feb 10 – Feb 14))

- Readings
    - Charles, C. C. & Silva, E. (2020). Finding & Evaluating Sources. In C. C. Charles (Ed.), Writing in the Social Sciences. EdTech Books. https://edtechbooks.org/writing/resources
    - Research Design in William Trochim's "Research Methods Knowledge Base
- Activities
    - The big 4: Quantitative, Qualitative, Database, and Mixed Methods
    - Methods Description

Week 6 – Library Research (Feb 17 – Feb 21)

- Readings

- o Charles, C. C. (2020). Planning Literature Reviews. In C. C. Charles (Ed.), Writing in the Social Sciences. EdTech Books. https://edtechbooks.org/writing/plan_lit_review
- Activities
  - o Annotated Bibliography entries 1-3

Week 7 – Writing the Proposal (Feb 24 – Feb 28)

- Readings -- none
- Activities
  - o Due: Proposal
  - o Due: Annotated Bibliography.

Unit 3: Graduate School Applications

Week 8 (Mar 3 - Mar 7)

- Readings: none
- Activities
  - o Graduate School Application: Process and Strategy.
  - o The Résumé.
  - o Personal Statements.

Week 9 (Mar 10 – Mar 14)

- Readings: None
- Activities
  - o Peer Review
  - o Due: Application Materials

Unit 4: Writing Research Reports

Week 10 (Mar 17 – Mar 21) Spring Break

Week 11 -- The Research Report (Mar 24 – Mar 28)

- Readings – none
- Activities
  - o Data collection is complete
  - o Data analysis
  - o Peer Review Results

Week 12 – Discussion and Introductions (Mar 31 – Apr 4)

- Readings -- none
- Activities
  - o Peer Review Research Report

Unit 5: Professional Presentations

Week 13 -- Poster Presentations (Apr 7 – Apr 11)

- Reading -- Poster Presentations in the Social Sciences
- Activities
  - o Research Report DUE

Week 14 -- Poster Prep and Practice (April 14 – Apr 18)
- Activities
  - o Poster Prep and Practice

Week 15 (Apr 21 – Apr 23)

- Activities
  - o Poster Conference: Final Monday of Semester, 6:00 – 8:00 p.m.
  - o Class Evaluations