



Division of Academic Enhancement UNIVERSITY OF GEORGIA

UNIV 2113 – Developing Literacies in the STEM Fields Fall 2022 – CRN 41812

Course Instructor Information

Instructor: Nicholas Colvard

Email: nicholas.colvard@uga.edu

Office: 215 Milledge Hall

Virtual Office: Zoom link posted on eLC

Student Hours: T&Th 10-11am, W 12:30-1:30pm

Course Meeting Information

Meeting Location: MLC 251

Meeting Time: Wednesdays 3:00-3:50pm

UNIV Courses are offered by the Division of Academic Enhancement, a unit of the Office of Instruction at the University of Georgia.

The Division empowers all students to achieve success with innovative courses, programs, services, and student-centered initiatives. The DAE supports students as they transition into higher education and sustains their progress through the University's unique academic environment. We are committed to students, committed to success.

Course Description

This course is an introduction to the fields of Science, Technology, Engineering, and Mathematics (STEM) and the skills students need to be successful within these domains. The course presents fundamental principles, applications, and processes of becoming literate within STEM fields as students explore some of the world's problems from the perspectives of STEM inquiry, learn to use various problem-solving strategies, and practice effective communication (both oral and written).

Our goal is to make you a more informed and literate student in STEM – Science, Technology, Engineering, and Mathematics. This will involve engagement with the course curriculum, with other students in the course, and with your instructor in a seminar style course design. See **Assignments and Projects** and **Course Outline** for further explanation.

Learning Objectives

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

- Identify the fundamental concepts and skills necessary to be successful as STEM majors.
- Interpret and critically analyze different forms of data and results (i.e. STEM texts and introductory research articles) in accordance with STEM conventions.
- Summarize and synthesize research relevant to the various STEM disciplines.
- Produce well-researched reports and writing appropriate to the various STEM fields.

Assignments and Projects

All course information including a copy of the syllabus, assignment due dates, and policy information can be found in eLC. Announcements about the class will be posted here as well as changes to the syllabus. You are responsible for checking eLC for announcements on a regular basis.

Your grade will be based on **900 total possible points**, calculated from the following:

Class Engagement	150 points
Course Assignments	400 points
Student Research Proposal Portfolio	300 points
Proposal Planning Worksheet	(50 points)
Research Proposal – Draft	(50 points)
Research Proposal – Final	(200 points)
Final Research Proposal Presentation	50 points

Class Engagement – based on 1) class session attendance and readiness and 2) engagement in the class discussion, activities, and material.

Course Assignments – based on class session topics/discussions and are meant to further enrich your learning and retention of the strategies, resources, or information covered.

Student Research Proposal – over the course of the semester we will cover different skills and resources to help support you in developing a research agenda (or at least a proposed agenda). For this project you will identify a research area of interest, identify a key faculty member to work with in this area, and assemble a research proposal that could lend to eventually serving as a CURO research proposal, or the like.

Grading/Evaluation

You should keep a record of all your assignment grades and save your returned graded assignments until the end of the term. Any complaint about a grade must be brought to your instructor's attention, in written form with a thorough explanation as to why you disagree with the grade, within one week of the grade being posted.

Grading Scale

A 93.0-100%	A- 90.0-92.9%	B+ 87.0-89.9%	B 83.0-86.9%	B- 80.0-82.9%
C+ 77.0-79.9%	C 73.0-76.9%	C- 70.0-72.9%	D 60.0-69.9%	F 59.9% and below

Course Materials

All required course content will be provided free of charge on eLC. You are welcome to print off materials for completing the assignments. You will submit all work via eLC.

Course Policies

Class is scheduled to run for approximately **50 minutes** each class period. You will need this time to adequately complete the class exercises and clarify any points with your instructor. You are expected to participate in all course exercises, making certain you fully understand the material covered. Remember, your instructor is there to help you with the exercises and to evaluate your performance and participation.

It is imperative that you prepare thoroughly for each and every class meeting. Preparation, or lack thereof, not only affects your grade in the course, but also impacts your team members. You cannot be an effective team member if you only have a vague idea of what's going on. Preparation means reading and understanding the course material, thinking about challenges, developing ideas to share with your fellow students, and communicating as necessary before class with your team members.

Late policy

20% is lost per day beyond the assignment's due date. Any assignment late beyond 1 week will not be accepted.

Unexcused Absence

Unexcused absences will be reflected in your attendance. Please look at the Participation Policy for the course to understand how missing class will impact your grade.

Communication

To comply with the Family Educational Rights and Privacy Act (FERPA), all communication that refers to individual students must be through a secure medium (UGAMail or eLC) or in person. Instructors are not allowed to respond to messages that refer to individual students or student progress in the course through non-UGA accounts, phone calls, or other types of electronic media.

Inquiry-Based Learning

This class will be designed so that you are prompted to ask questions, investigate the course materials, and probe deeper into particular discussion topics for clarity on a subject. In some instances, you can expect to do this in teams and other times you will do this independently. This learning strategy provides a more realistic experience of conducting research than you would be able to get with a traditional class format.

Group work

Many of your experiences in UNIV 2113 will be based upon work completed in small groups. You are encouraged to interact with your instructor and your classmates when completing your class work and your homework. However, you are expected to complete all written assignments by yourself (i.e., showing independent thought) unless otherwise directed by your instructor. If you are experiencing problems with one or more group members, please inform your instructor immediately so that they may take this into consideration when they evaluate each student at the end of the semester.

In STEM, all co-authors on group projects are held accountable for the accuracy and originality of the published work. Similarly, on course assignments, when a student's name is on a group project, this implies that they take responsibility for the accuracy and originality of the entire assignment (and also for any academic dishonesty that may have been involved). Students often have difficulties determining how to demonstrate independent effort when they work in groups to complete assignments (e.g., "we all did the same thing so shouldn't the work that we turn in be the same?"). Please carefully review the information "Expectations about Group Work & Plagiarism", located in eLC, under the link "Plagiarism." You are responsible for being familiar with this document. If you ever have a question about whether or not you have crossed the fine line between group work and independent work, ask your instructor for assistance before you hand in an assignment.

Participation Policy

Attendance and Participation is required for this class. Missing even one class means that you have missed a significant portion of the course. Please DO NOT schedule any other appointments or activities during your scheduled class sessions.

If a student is unable to complete an assignment, they should contact the instructor as soon as possible to determine if an accommodation would apply. Please note: attending asynchronously does not extend the deadline of the assignments.

Class Participation accounts for **15% of your overall grade**. Being prepared for synchronous and/or asynchronous class discussion on the provided reading material or posted information is highly necessary in order for you to do well in the class.

Grade Appeal Process

University of Georgia students have the right to appeal academic decisions. The burden of proof for an appeal rests with the student. The policies governing the process of appealing grades are covered in the Academic Affairs Policy Manual, General Academic Policy: Student Appeals ([Section 4.05-01](#)). All grade appeals must be initiated in writing to the instructor within one calendar year from the end of the term in which the grade was recorded. The process for appealing a grade in a UNIV course can be found at: <https://dae.uga.edu/courses/appeal-process/>.

Academic Honesty Policy

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <https://ovpi.uga.edu/academic-honesty/academic-honesty-policy>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

Student Exceptionalities Statement

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with the Disability Resource Center (Voice: 706-542-8719 or TTY: 706-542-8778) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

Student Wellness

To be brief: take care of yourself. While navigating the rigorous (at times treacherous) experience of college, we easily may fall prey to poor habits and choices. I encourage students to maintain a healthy lifestyle. If you (or anyone you know) experiences debilitating academic stress (i.e., stress that paralyzes, induces persistent fear/anxiety), challenging life events, persistent negative emotions/moods, or other factors that hinder mental, physical, or emotional wellbeing, I encourage you to seek resources you need to be successful.

University Health Center

- Website: <https://www.uhs.uga.edu/newstudents/newstudents>
- Phone: 706.542.1162
- Email: contact@uhs.uga.edu
- Suicide Prevention 706.542.2
- Sexual Assault 24 Hour Hotline 706. 542.SAFE200

Counseling and Psychiatric Services (CAPS)

- Website: <https://www.uhs.uga.edu/caps/welcome>
- During office hours, you may call 706-542-2273.
- For an after-hour crisis, you may call 706-542-2200. Ask to speak with a CAPs clinician.

Student Care and Outreach

- Website: <http://sco.uga.edu/>
- Phone: 706-542-7774
- Email: sco@uga.edu

Student Veterans Resource Center

- Website: <http://svrc.uga.edu/>
- Phone: 706-542-7872
- Email: svrc@uga.edu

Other Division Resources

From peer tutoring through the Academic Resource Center to Academic Coaching to Student Success Workshops and more, the Division is committed to the success of all students at the University of Georgia. For more on these and other resources, visit <https://dae.uga.edu>.

Course Outline

The schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better student learning. All readings are required unless otherwise noted. Students should read/know required material by the date listed, at which time we will discuss or use the scheduled readings in class.

Week	Topic of Discussion	Course Assignments (due by start of class)
1: August 17 th	Introduction to STEM Literacies Why does STEM matter?	
2: August 24 th	Study Skills & Strategies	Me and My Major Assignment
3: August 31 st	PARR Test – Purpose, Authority, Reliability, Relevance	Study Strategies Assignment
4: Sept. 7 th	Career Center and CURO	PARR Test Assignment
5: Sept. 14 th	<i>*Science Library Visit</i>	
6: Sept. 21 st	Writing in STEM – Paraphrasing & Plagiarism	<i>Proposal Planning Worksheet</i>
7: Sept. 28 th	Writing in STEM – Organization in writing and citing	Paraphrasing Assignment
8: Oct. 5 th	Dissecting the Literature	<i>Research Proposal Outline & CV</i>
9: Oct. 12 th	Data Generators	Dissecting the Literature Assignment
10: Oct. 19 th	Peer Evaluation and Constructive Feedback	Data Generators Assignment
11: Oct. 26 th	In-class Peer Review	<i>Research Proposal – Draft & CV</i>
12: Nov. 2 nd	Data Visualization – Reporting Data	
13: Nov. 9 th	Data Visualization – Editing Graphs	<i>Reviewer Response</i>
14: Nov. 16 th	Student Presentations	Data Visualization Assignment <i>Final Research Proposal Presentation</i>
15: Nov. 23 rd	Thanksgiving Break	
16: Nov. 30 th	Class Wrap-up	<i>Research Proposal - Final</i>

**Class will meet at the Science Library Classroom for this class session*

Note: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.