Experimental Science 1 Honors 2025-2026

Instructor: M. Cordero

E-mail: mcordero@pky.ufl.edu

Direct Phone: 352-392-1554

Office Hours: Tuesdays and Thursdays
3:05-3:45 pm

Course: Experimental Science 1 Honors

Course Meets: Alternating days-Day B

Office Location: 3rd floor blue PK 310

Please review the information shared within the following link

- 2025-2026 Code of Student Conduct

Course Description

The Experimental Science 1 Honors course is designed to be hands-on and with real-world applications. It is intended to build research and inquiry skills that will help students be successful in other advanced courses. Students can expect to read current events, hear from guest speakers, take field trips, and do lots of labs, including designing your own investigations.

Course Grade

This is a year-long course and the grades are issued at the end of each semester. The grade for the first semester is issued in December and the grade for the second semester is issued in May.

Tests linked to the course

No state test or certification test is linked to this course.

Goals & Standards

- Experimental Science 1 Honors Florida Standards
- Develop skills to critically analyze a peer-reviewed scientific journal article
- Develop skills in the area of scientific practices as described below.

Experimental Science 1 Honors 2025-2026

Science and Engineering Practices*	Asking Questions and Defining Problems Developing and Using Models Planning and Carrying Out Investigations Analyzing and Interpreting Data Using Mathematics and Computational Thinking Constructing Explanations and Designing Solutions Engaging in Argument from Evidence Obtaining, Evaluating, and Communicating Information

*https://www.nextgenscience.org/sites/default/files/resource/files/Appendix%20F%20%20Science%20and%20Engineering%20Practices%20in%20the%20NGSS%20-%20FINAL%20060513.pdf

Course Schedule*

Semester 1 & 2 Modules
Investigations in Chemistry
Investigations in Biology
Scientific Literacy
Projects Hub

*Subject to change

Required Course Materials

Texts and Media

Textbooks (for lab investigations):

- *Argument-Driven Inquiry in Chemistry: Lab Investigations for Grades 9-12,* V. Sampson et al., NSTA press, 2014
- *Argument-Driven Inquiry in Biology: Lab Investigations for Grades 9-12,* V. Sampson et al., NSTA press, 2014

Other texts: American Chemical Society reading articles; Howard Hughes Medical Institute education resources

Media: Click HERE to access the resources used in this course.

Experimental Science 1 Honors 2025-2026

Procedures

Supplies

- Folder with prongs and pockets (to hold daily copies)
- Binder (to keep all copies at home, organized by unit)
- 4 tab binder dividers
- pen/pencils
- Chromebook (fully charged/provided by school)

Homework

Class time is allocated every day to work on the daily task(s) so homework usually consists of finishing the daily task(s). These daily assignments are graded as Habits of Work (HOW) assignments (see grading rubric in the Grading policies section below).

Laboratory Assignments

To comply with the federal and UF Environmental Health and Safety Division regulations, students are expected to wear appropriate personal protective equipment (PPE) in order to participate in the lab investigations. PPE includes long pants that cover the ankle with no holes, shirts with sleeves and closed toed shoes. Socks and CROCS are NOT considered proper personal protective equipment (PPE). Students are informed about the labs at the beginning of the week and a Canvas inbox message reminder is sent by 6 pm on the day prior to the lab.

- Students not wearing the proper attire on the day of the lab will be asked to wear scrubs shirts and pants that are available in the classroom on a first come first serve basis.
- Students that do NOT wear closed toed shoes or the available scrubs will be seated for the entire duration of the lab wearing safety goggles. They will record data but will not be able to handle chemicals and glassware for safety reasons.
- Students that are absent are still responsible for submitting the lab assignment and all the course content covered in the investigation. They can ask their peers for the data gathered or they can use the data recorded and available on Canvas.
- Students should expect wearing PPE at least once a week.

General Expectations

4Rs

- Responsible: Students own their behaviors and take responsibility for them.
- Respectful: Students show respect for all people, materials, and places they attend.

Experimental Science 1 Honors 2025-2026

- Resilient: Students take on challenges, and develop and apply skills to overcome them.
- Ready: Students are prepared to work and learn everyday; having the appropriate materials and a ready attitude.

Late Work Policy

Students are encouraged to complete all assignments by the specified due date which in most cases is at the end of the day (by 11:59 pm) to receive full credit (4/4 points) as indicated in the HOW rubric (see below). However, in order to provide some flexibility to their busy schedules, HOW assignments can be submitted on Canvas until the end of the unit with a late work penalty (as indicated under the timeliness category for the rubric of the HOW assignments). Once the HOW assignments are closed and the unit completed students will NOT receive credit for the HOW assignments.

Communication Protocols

Students can communicate with me by Canvas Inbox messages.

Families can communicate with the teacher by email to mcordero@pky.ufl.edu

Electronic Device Policy

Students must come to class every day with their charged Chromebook. During class, the Chromebook should be used only to participate in the class. Students should not have personal electronic devices out during class at any time for any purpose, unless instructed to do so.

9th-12th Grade

Students may possess a wireless communications device but may only use it outside of class time - or when a teacher gives explicit permission for instructional purposes. Devices must be stored in teacher-designated areas (backpack in the third floor Blue wing) during instructional time.

PK will provide access to telephones for students who need to contact families during times when they are prohibited from using their personal device.

Grading Policy and Assessments

Grading

P.K. Yonge's Grading and Credit system is based on our shared beliefs about the purpose of assessment:

- Students should have a clear understanding and shared ownership of learning goals

Experimental Science 1 Honors 2025-2026

- Grades should communicate what students know and are able to do both within and across disciplines
- Students should have multiple opportunities to practice, receive feedback, and demonstrate their knowledge and skills
- It is critical for students to develop productive habits of work alongside content and skill development

Type	Examples	% of Grade
Habits of Work	daily assignments, participation and collaboration	5%
Formative	Content quizzes, labs design/procedure	20%
Summative	Projects; lab techniques assessments; evidence-based explanations and argumentation	75%

The chart below outlines the relationship between numerical grades, letter grades, mastery-language, and credit within our mastery-based system.

Mastery-Language	Range (4-point grade system)	Meets Standard Course Credit Earned
Mastery (A)	3.51 - 4.0	GPA Point 4
Proficient (B)	3.01 - 3.5	GPA Point 3
Approaching (C)	2.51 - 3	GPA Point 2
Beginning (D)	2.01 - 2.5	GPA Point 1
Not Meeting (F)	.01 - 2.0	No Course Credit
No Evidence	0	No Course Credit

Experimental Science 1 Honors 2025-2026

Habits of work (HOW) assignments will be assessed using the rubrics below.

Criteria	Grading Scale	What is expected for the scoring criteria?
Timeliness	2, 1, 0	2-Work is completed by the due date 1- Work is completed but not before the due date 0- Assignment is not completed
Quality of work	2, 1, 0	2- All work is of high quality (clear and complete sentences; calculations are clearly shown and include correct units.) 1- Work is completed but not of high quality (is not clear or does not show effort). 0- Work is not completed
Focus, Engagement and Effort	2, 1, 0	2-Always-Is always focused, engaged and showing full effort 1-Often-Is often focused, engaged and showing effort 0-Infrequently-Is infrequently focused, engaged and showing effort
Social responsibility	2, 1, 0	2- Always- Is always mindful of classroom norms, respectful with classmates and teachers, treats materials with care and is a positive caring citizen in class 1-Often-Is often mindful of classroom norms, respectful with classmates and teachers, treats materials with care and is a positive caring citizen in class 0- Infrequently- Is infrequently mindful of classroom norms, respectful with classmates and teachers, treats materials with care and is a positive caring citizen in class

Reassessment Policy

Students will be able to resubmit an entire project as long as the topic/question is different to the original one. Students may have to make special arrangements to make up for labs if they are absent for any given reason. There are no resubmissions for habits of work assignments.

Experimental Science 1 Honors 2025-2026

Academic Dishonesty

It is expected that the work you submit in this and all of your courses is your own original work, or if not, contains full acknowledgment of borrowed sources. The following instances are academically dishonest:

- Submitting the exact document/work of your classmates or lab teammates
- Submitting the same project as one of your classmates or a student in another class
- Copying answers from an online search or generated by artificial intelligence tools (i.e.ChatGPT). *AI generated responses* can be identified by recognizing vocabulary and content that is beyond the scope of this course. In the case of a research project, copying information from a resource without APA style citation.

Any academic dishonesty will result in the *failure of that assignment as the minimum consequence*; other consequences range from failure of the course to academic probation to dismissal from P.K. Yonge.

ALL instances of academic dishonesty will be reported to the student's counselor and P.K. Yonge administration.