Practicum

CHE 411 - CRN# xxx Semester 20xx



Instructor: TBA E-mail: TBA Lab Hours: 3 – 9 Lab (1 - 3 Credit Hours) Lab Location: TBA Office: TBA Phone: TBA Office Hours: TBA

COURSE DESCRIPTION

CHE 411 Practicum (1–3) A. Prerequisite: departmental approval. Students will gain specific experiences through participation in planning, teaching, analysis, and/or required maintenance in a designated undergraduate chemistry course. Formal project assigned by a faculty mentor. May be retaken for a maximum of three hours. 3–9 Lab

COURSE OVERVIEW

Designed for chemistry majors or those interested in science education. Specific skills gained by the student will be dependent on the specific project determined by the student and a designated faculty mentor. Examples include (but not limited to) support in the preparation of a course laboratory, maintain and calibrate specific chemical instrumentation and/or equipment, assist in the design of a novel laboratory experiment, and/or investigating lecturing/tutoring techniques.

TEXT / READINGS / MATERIALS

Faculty Mentor will provide references and related handouts pertaining to the formal project that will need to be completed during the semester.

OFFICIAL E-MAIL

An official EKU e-mail is established for each registered student, each faculty member, and each staff member. All university communications sent via e-mail will be sent to this EKU e-mail address.

STUDENT LEARNING OUTCOMES

Upon completion of the course work all students will be able to:

- 1. Demonstrate understanding of background information for their specific project (based on material from literature).
- 2. Perform and understand appropriate techniques specific to their specific project.
- 3. Demonstrate awareness for all forms of laboratory safety.
- 4. Record and manage appropriate information in a scientific notebook.

COURSE REQUIREMENTS

ATTENDANCE POLICY: It is important that students attend all meetings with the faculty mentor during the appointed time. Students are expected to be present for all Chemistry 411 classes by the designated time (determined by the faculty mentor). A student who accumulates more than two (2) unexcused absences will have their lecture grade decreased as follows:

3 to 5 unexcused absences	=
6 to 8 unexcused absences	=

- 1.0 letter grade decrease in final lecture grade 1.5 letter grades decrease in final lecture grade
- 6 to 8 unexcused absences > 9 unexcused absences

2.0 letter grades decrease in final lecture grade

Excused absences must be approved prior to the missed class or by an appropriate note.

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STUDENT PROGRESS: The electronic course management system Blackboard will be utilized for this course (website: <u>http://learn.eku.edu</u>). Assignments, handouts, and additional course materials will be available with Blackboard. Students can monitor their progress for the course as written assignments are returned and scores are posted through Blackboard.

<u>EVALUATION METHOD</u>: The evaluation for this course will be based on the student's performance on the written assignments and attendance/participation according to the following:

- 1. <u>Student Participation</u>: Each student will need to attend assigned meetings with the faculty mentor. Points for attendance will follow previously mentioned policy.
- 2. <u>Literature Assignments</u>: Locate, read, discuss, and reflect upon relevant journal articles from the chemical education research literature.
- 3. <u>Formal Project:</u> Faculty mentor will outline specific project. Progress reports will be required to monitor the development of the specific project by the mentor with a final report at the end of the project.

The following evaluation scale will be used for the course:

Student Participation	25%
Literature Assignments	15%
Progress Reports / Formal Project	60%

Letter Grade	Grade Range
A	90% - 100%
В	80% - 89%
С	70% - 79%
D	60% - 69%
F	< 60%

DISABILITY STATEMENT:

A student with a "disability" may be an individual with a physical or mental impairment that substantially limits one

or more major life activities such as learning, seeing or hearing. Additionally, pregnancy or a related medical condition that causes a similar substantial limitation may also be considered a disability under the ADA.

100%

If you are registered with the Office of Services for Individuals with Disabilities, please obtain your accommodation letters from the OSID and present them to the course instructor to discuss any academic accommodations you need. If you believe you need accommodation and are not registered with the OSID, please contact the office in the Whitlock Building Room 361 by email at disserv@eku.edu or by telephone at (859) 622-2933. Upon individual request, this syllabus can be made available in an alternative format.

ACADEMIC INTEGRITY:

Academic integrity is a fundamental value for the Eastern Kentucky University community of students, faculty, and staff. It should be clearly understood that academic dishonesty is not tolerated and incidents of it will have serious consequences. Anyone who knowingly assists in any form of academic dishonesty shall be considered as responsible as the student who accepts such assistance and shall be subject to the same sanctions. Academic dishonesty can occur in different

forms, some of which include cheating, plagiarism, and fabrication.

Students are advised that EKU's Academic Integrity policy will strictly be enforced in this course. The Academic Integrity policy is available at <u>http://studentrights.eku.edu/academic-integrity</u>. Questions regarding the policy may be directed to the Office of Academic Integrity. Ignorance is no defense.

IMPORTANT DATES: (Actual dates from Colonel Compass: http://colonelscompass.eku.edu/)

ТВА	Last day to add or drop without a "W"; and last day to change from "Audit" or "Pass/Fail" to Letter Grade
ТВА	Last day to convert Letter Grade to "Audit" or "Pass/Fail"
TBA	Last day to withdraw from class (online) without fee
TBA	Mid-term Date
ТВА	Last day to withdraw from University. Last day to withdraw from a course with instructor's written signature and incur withdrawal fee

<u>TENTATIVE SCHEDULE</u> Semester 20xx CHE 411 – Chemistry Practicum

A faculty member will be identified as the project mentor for the student. The mentor is responsible for helping the student with chemical teaching through identification of a formal project for the course. A schedule will be developed that will include a series of exercises based on the formal project. For the formal project, progress reports at regular intervals (e.g. monthly) will occur concluding with a final report to the course instructor at the end of the semester. An assessment rubric will be applied to each of these reports. The course instructor should be consulted for all issues regarding course administration (forms, final report, etc.). Final Report Due Date: TBA

Undergraduate Chemistry Practicum (CHE 411) – Progress Report Score Rubric

Progress reports are aimed to get students to summarize what they have learned or discovered on the formal project in the assigned time period. Mentors will review and give comments on the progress reports. Progress reports can be brief but concise in emphasizing the most important aspects (academic integrity on the syllabus will be strictly enforced). Progress reports will be typed and graded according to the following rubric:

Progress Report Date:	Student:	Overall Score:
Project Title:	Faculty Mentor:	/ 50
Section Criteria	Comments	Score
1. <i>Introduction.</i> Progress reports must have a brief but reasonably thorough background of the project and the current stage of the study. A summary of a literature review can be included.		/ 10
2. Methodology / Process. Methods of the project must be clearly stated.		/ 10
3. <i>Preliminary Results.</i> Information pertaining to the development of the project should be included. A limited number of figures and data can be included.		/ 10
4. <i>Conclusion.</i> Conclusion must reflect student learning and discovery from the project in the assigned time period; future steps of study will be stated, if needed.		/ 5
5. Clarity / Spelling / Grammar / Terminology: Sentences will be clear and unambiguous; use proper grammar, varied sentence structure, and correct spelling; chemistry terminology will be used correctly.		/ 10
6. <i>Organization:</i> Report must be well-organized, logical progression and transitions from one section to the next.		/ 5

Undergraduate Chemistry Practicum (CHE 411) – Formal Project Report Score Rubric

The final formal project report will give a complete description of the project with stated objectives and the results produced in the allotted time. If progress reports have been filled out appropriately and reviewed by the faculty mentor, the final report will be a summary of these reports. The final report should thoroughly explain the most important aspects of the project (academic integrity on the syllabus will be strictly enforced). The final report will be typed and graded according to the following rubric:

Final Report Date:	Student:	Overall Score:
Project Title:	Faculty Mentor:	/ 100
Section Criteria	Comments	Score
1. Title Page / Abstract.		/ 10
2. Introduction / Background.		/ 20
3. Results & Discussion (Including Figures / Tables).		/ 30
4. Summary / Conclusions.		/ 20
5. Bibliography (ACS Style).		/ 10
6. Organization / Spelling / Grammar.		/ 10