

Agriculture

- Create and maintain a website for the ISU Retail Meat Shop. The website should include a description of the shop, including: a brief history, hours of operation, contact information, description of products offered, and photos.

Art

- The student will design and produce a set of salt and pepper shakers, a lidded container that utilizes cloisonne enamel, and one set of chessmen, which will entail rubber molding.
- Complete two or three groups of several small sculptures. For these sculptures, student will investigate both slipcast and hand building methods in order to find the approach most appropriate to ideas. Will also be investigating issues of surface which will involve glaze testing and other means of achieving a surface suitable to sculptures.

Arts Technology

- Bring knowledge of Maya to a more advanced level through research, on-line peer interaction & trouble-shooting, tutoring and a series of projects (5 large projects consisting of 32 subprojects) that increase in difficulty.
- Complete a body of work with more specialized assistance from instructor. Will meet weekly or bi-weekly for input, advice, and learning of photo techniques.

Biological Sciences

- The effects of salinity on muscle free amino acids in the killifish *fundulus heteroclitus* and *fundulus notatus*.
- Evaluate the effectiveness of using short video clips in a Biology 101 lecture. The video clips work to illustrate key biological concepts, provide a mental anchor for the students, and increase the student's enjoyment of the course.
- Perform immunology experiments using standard techniques. Student will spend 2-3 hours per week for each credit hour registered. Also attend weekly lab meetings if schedule permits.
- Research Chemistry vanadium coordination chemistry and biochemistry enzyme studies.
- Perform research on the role of high-molecular weight in the interaction between human respiratory tissue and the bacterial cells. Summarize work in a scientific paper style.
- Analyze data collected from last semester's seed germination project and create a poster to present at the Undergraduate Research Symposium. Also collect data on garlic mustard and spring ephemerals in the experiment plots.
- Work on immunology project in biology lab and attend weekly meetings.

Chemistry

- Developing a structurally new template for conducting asymmetric synthesis based on previous studies by Dr. Hitchcock.
- Determination of structure/property relationships in biological macromolecules.
- Synthesis of benzocarboxporphyrins; Learn to prepare benzocarboxporphyrins, then exploring their potential as ligands for lanthanides.
- Oxadiazinones as chiral auxiliaries: The asymmetric synthesis of a proposed hydroxyethyl isostere of a HTLV-1 protease inhibitor.

- Insulin enhancing vanadium complexes and analogues for tris-histidine metal binding sites for some enzymes. Will synthesize and characterize novel metal complexes that could potentially mimic the active site of tris-his/metal active sites of enzymes.
- Investigate the reaction between 1,4-naphthoquinone anion radicals and the free radical nitric oxide in multiple biological processes.

Communication

- Layout/Design of a style guide for the Girl Scouts of Centrilio Council. Proper elements of a portfolio to be used in the job search. Convert all past work into a portfolio with which to market self.

Communication Sciences and Disorders

- Examination of four years of screening data through data management, creating data files, library work, assisting in creating a survey, and collecting/analyzing survey data.
- Student will participate in an ongoing research project. This project involves teaching adults with developmental delays to communicate in functional manners using symbolic modes (i.e. AAC devices). Student will attend one session weekly and will help with data collection and/or leading of the groups of participants. Student will present her role in this project at the 2006 Undergraduate Research Symposium. Furthermore, student will write a 5-page paper regarding communication interventions with adults with developmental disabilities.
- Student will conduct a case study with transcription of the narrative skills in one adolescent with CAPD and one adolescent with typical development. Will prepare a report detailing her findings.
- Work in the fluency lab to do acoustic analysis of both normally fluent children and children who stutter. Analyze speech rate across different types of utterances and write a 10 page literature review on the topic of speech rate in people who stutter.

Computer Science

- Write a computer program that recognizes the edges of a cube from a picture, by applying machine learning methods.
- Study machine learning using Machine Learning by Tom Mitchell. Select a puzzle or game and apply several techniques to it. Write a comparison of the techniques used.

Curriculum & Instruction

- Student will work with a second-grade teacher to practice lesson planning and classroom management in the area of science (specifically soils) and then teaching these lessons in a team-teaching environment. Will also learn about misconceptions children have relating to science. Will write a reflection for evaluation at the end.
- Compile a portfolio containing IL Learning Standards for Mathematics and/or the districts grade level objectives. Along with each standard, compile a list of methods used to teach those concepts, as well as a brief description on if they worked or not. Implement strategies daily in classroom.
- 3 week observation and assistance in a bilingual classroom.

- Develop a book of lesson plans for the primary grades. Volunteer in a 1st grade classroom, assisting the teacher. Implement 5-10 lesson plans in the classroom and receive written assessments from the teacher.

Economics

- Research several articles on economically efficient sentencing. Then summarize these articles and pull out any common themes or ideas. The goal is to determine the efficient punishments that will deter crime.
- Research legislative history of deregulation with respect to those states actively participating. Compare the success and failure.

English

- Write a complete screenplay. Student will adapt a play that was previously written. The final project will consist of a portfolio that contains: finished screenplay; all drafts and notes; original play; and reflective essay.
- Student will direct a play that she wrote for The Cardboard Players in El Paso. Project involves creating a portfolio of all the documents, keeping a journal of rehearsal experiences, and writing a reflective essay. Also included in the portfolio are press releases, programs, rehearsal schedules, lists, and paper props.

Family and Consumer Science

- The Effect of Menopause on Women's Health. Student will be required to participate in the menopause data analysis and the preparation of the manuscript.
- Interior Design: Research and analysis of the current practices of Sustainability in the Interior Design business with emphasis on the Commercial Industry. Analysis of research will culminate in notebooks.

Finance, Insurance & Law

- Complete course guide for CPCU 510; Take CPCU 510 exam; Turn in Course Guide 2 weeks before exam date for a B; pass the exam for an A.
- Student will revise paper that was written last semester (054) and present a PowerPoint presentation at the Research Symposium. Subject of the paper is disparity in sentencing.
- Student will continue the work begun by another student in a previous semester which compares the performance of buy-and-hold, constant mix, and constant proportion portfolio.

Geography-Geology

- Student will prepare minerals for isotope analysis. Once data is gathered, student will compare with previously published isotope data to try and determine the magmatic and alteration history of the St. Francois Mountains in Missouri. Student will also produce a sample location map by scanning in the original and having layers with geologic features, quartz data, whole rock data, and zircon data. This will all be in preparation for a poster presentation at the National Geological Society of America Conference.
- Study what terraces are, how they form, and how they locate on a map. Use the Mackinaw Quadrangle Topographic map to determine possible locations of terraces.

Take a trip to the field to collect samples to bring back to further analyze. Then map the terraces accordingly.

Health Sciences

- Student will be responsible for HSC 262 lecture curricula review: Analysis of three lecture exams test question database; Analysis of three lecture quizzes question database; reflection piece stating what has been gained from this independent study.

Kinesiology & Recreation

- Design a research experiment that takes a look at why students join the teaching field. Create a full experiment write-up over the topic. Survey students to determine the motives among the different levels of education.
- Complete data collection responsibilities; become familiar with IRB informed consent requirements; become familiar with testing protocols used in motor learning research; become familiar with basic experimental design. Student will complete data collection and demonstrate an understanding of informed consent, testing methods, data entry procedures, and rudimentary research design through a brief written report.

Math

- Research the various methods of determining the primality of a given number. Also study the underlying mathematics to further understand how these methods work. Meet with instructor weekly to discuss and submit a final report.

Management & Quantitative Methods

- The student will study in detail the union certification election process which is the primary methodology for unions to obtain employer recognition in the United States at the present time.

Music

- Study the materials normally presented in the Vocal Pedagogy and explore the subject in the music theater field.

Nursing

- Will attend the Midwest Nursing Research Society in Indianapolis, IN and report orally.
- Will attend the EBP Conference and the Honors council.

Physics

- Investigate the literature on magnetic super latitudes and develop a work plan to fabricate. To also investigate the literature toward future research in nano scale met materials.

Politics & Government

- Work on a political campaign; Analyze and write a 12-page paper on a policy topic that applies to a campaign. Write a one-page recommendation on how the policy should be implemented.

- Critically analyze the Bush doctrine of preemptive self-defense by providing historical facts that frame the contemporary debate. Presented at the 2005 Naval Academy Foreign Affair Conference in April.
- Be responsible for funding requests, accounting, and tax registration for Peruvian Project.
- Record chronologically the steps taken for the third party candidates to run for U.S House of Representatives. Accumulation of this study will be presented in a portfolio.
- To develop skills in constructing and implementing research projects and leading research teams. Projects are assigned throughout the semester with specific dates. Evaluation will be determined by completion of assignments, ability demonstration to constructively criticize and improve, and motivation to complete projects.

Psychology

- Meet weekly with instructor to write up results of thesis for publication in a peer reviewed psychology journal. Also meet with instructors weekly to discuss other research findings that may coincide with thesis.
- Have faculty supervise research in the area of personal relationships. The student will be responsible for stimulus development, collecting, entering and analyzing data. Write a report on the research findings.

Special Education

- Examine collaboration between cooperating teachers and pre-service teachers with qualitative and quantitative data.
- Will teach a young preschooler who is deaf and has a pervasive developmental disability. Interactions will include: observing the child and his teacher in the learning environment; meeting with me or the autism project coordinator on a consistent basis; creating learning materials that can be used by the classroom teacher; working one-on-one with the student; and writing a two page reflection paper over the experience and perceptions of the strategies that were used.
- Create a Family Assessment Portfolio based on the critical components of scrapbooks parents from the Central Illinois Down Syndrome Association and an iLife movie to accompany it. Will present work at a national conference.
- Work on the Family Assessment Portfolio Project. Work with a team of researchers to creating the FAP, collecting data from preservice teachers and parents, and analyzing the data collected.
- Student will gather resources for SED 377 and possible other course SED 101. Also transcribe an assignment for future classes.

Technology

- An analysis of cost and duration for construction demolition.

Theatre

- Attend lectures on production management, learn what is meant by a Production Manager, and complete research and assignments.
- Motors and Motor Control for the Stage. The student will use what was originally learned in Advanced Stagecraft, regarding motors and motor control, and expand on that. By the

end of the semester, student should have a broad knowledge of engineering a movable set as well as putting that knowledge to use on a realized design or a mock-up.

- Direct “Danny and The Deep Blue Sea”, including rehearsals each week with actors, all pertinent analysis and a final performance of the piece.
- Study the issues of feminism in the Disney Princess line as it related to females of young age.