Informatics

INFO 490  **Special Topics**  credit: 0 TO 4 hours.
Topics of current interest. 1 to 4 undergraduate hours. 1 to 4 graduate hours. May be repeated if topics vary. Prerequisite: Consent of instructor. Other prerequisites as specified for each topic offering. See Class Schedule.

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<th>CRN</th>
<th>Type</th>
<th>Section</th>
<th>Time</th>
<th>Days</th>
<th>Location</th>
<th>Instructor</th>
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<td>FAB LAB - Art-East Annex, Studio 2</td>
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Credit Hours: 3 hours
Makerspace Studio 2
Not intended for students with Freshman class standing. Restricted to Undergrad - Urbana-Champaign.
This course is a foray into game studies via makerspace production mediums. Students will study the role of play, tinkering and gaming in design, research and innovation and be challenged to learn a variety of makerspace production tools and techniques to create games. This course will include three major components (1) physical board game design, (2) introductory computer game design and (3) investigation into the narrative themes, artistic production, interaction mechanics and culture that make games engaging. Class will meet in the CU Community Fab Lab in Art Annex II. Students who have taken a makerspace class before are encouraged to enroll. This section is for undergraduate students only. Graduate students should register for CRN 65245.

Credit Hours: 4 hours
Makerspace Studio 2
Not intended for Undergrad - Urbana-Champaign.
This course is a foray into game studies via makerspace production mediums. Students will study the role of play, tinkering and gaming in design, research and innovation and be challenged to learn a variety of makerspace production tools and techniques to create games. This course will include three major components (1) physical board game design, (2) introductory computer game design and (3) investigation into the narrative themes, artistic production, interaction mechanics and culture that make games engaging. Class will meet in the CU Community Fab Lab in Art Annex II. Students who have taken a makerspace class before are encouraged to enroll. This section is for graduate students only. Undergraduate students should register for CRN 65245.

Credit Hours: 3 hours
Makerspace Studio 1
Not intended for students with Freshman class standing. Restricted to Undergrad - Urbana-Champaign.
This course is an exploration of the history, function, and meaning of community and education-oriented makerspaces. Students in this section will evaluate emergent makerspace curricula for learning in formal environments, like schools, as well as informal settings, like libraries. Their work will culminate in helping to plan and execute a makerspace activity workshop with our community partners. In order to prepare them to do this they will be familiarized with several methods of teaching and learning rapid prototyping
and iterative design techniques. This will include emphasis on a variety of computer-driven tools and mediums, such as e-textiles, 3D scanning/printing, electronic cutting and small board electronics. Class will meet in the CU Community Fab Lab in Art Annex II. Students who have taken a spring makerspace class before are encouraged to enroll. This section is for Undergraduates only. Graduate students should register for CRN 68914.

Credit Hours: 4 hours
Makerspace Studio 1
Not intended for Undergrad - Urbana-Champaign.
This course is an exploration of the history, function, and meaning of community and education-oriented makerspaces. Students in this section will evaluate emergent makerspace curricula for learning in formal environments, like schools, as well as informal settings, like libraries. Their work will culminate in helping to plan and execute a makerspace activity workshop with our community partners. In order to prepare them to do this they will be familiarized with several methods of teaching and learning rapid prototyping and iterative design techniques. This will include emphasis on a variety of computer-driven tools and mediums, such as e-textiles, 3D scanning/printing, electronic cutting and small board electronics. Class will meet in the CU Community Fab Lab in Art Annex II. Students who have taken a spring makerspace class before are encouraged to enroll. This section is for Graduate Students only. Undergraduate students should register for CRN 68131.

Credit Hours: 3 hours
The Video Game Dev Process
Not intended for students with Freshman class standing.
The emphasis of this course is understanding the video game development process as seen in current Game Studios. The course will focus on key elements of the process including each phase of the development timeline, scheduling, prototyping, iteration, QA, game builds and player research. Students will form small teams (4-6 with the goal of using the concepts taught in class to create a video game from a catalog of pre-existing designs. Considering the limited time frame of the semester, the state of the final product is not as important as understanding the game develop cycle. Knowledge of a programming engine (preferably Unity) is desired but not a pre-requisite.

Credit Hours: 3 hours
Content Management Systems
Not intended for students with Freshman class standing.
In this course we will explore the use of open source web-based content management systems (CMSs) to design and deploy flexible websites that serve dynamically changing content. Students will become adept at assessing needs, designing an information architecture, and guiding a collaborative design process. They will develop technical skills in managing, customizing and extending the functionality of an open-source content management system, as well as in server-side scripting and team-based software development.

Credit Hours: 3 hours
Design & Prog Text Based Games
Not intended for students with Freshman class standing.
INFO 490 JP: Designing and Programming Text Based Games and Simulations. In this course, you will be introduced to the "design work" of game authoring, and will apply these theoretical ideas to specific programming practices and skills. You will become proficient in Inform 7, a programming language and design system for interactive fiction (IF), and text-based computer games and simulations. By the end of the semester you will have developed a game or literary work of IF, and made a substantive contribution to a team-written, historical simulation project, dramatically recreating a key moment in Illinois history. This class meets with CWL 461 JP (CRN 65537) No prior programming knowledge is required for students to be successful in the course. Students will be expected to bring a laptop to class.
| 65222  | Online  | MH  | ARRANGED - | -   | Haberman, M Narisetli, S Smith, B |

Credit Hours: 3 hours  
Intro to Prog for Data Science  
Not intended for students with Freshman class standing.  
Introduction to Programming for Data Science is for students who want to learn about solving problems common in data sciences but have little or no programming experience. The class is asynchronous (students can access material on-line but within specified timeframes) and taught online. Data Science lies at the intersection of statistics and computer science and focuses on extracting information from data. This class will immerse students on topics of software construction, design, programming paradigms and the semantic and syntax of the Python language and then focus on some of the necessary workflows to move raw data into information. The class will explore common Python modules (libraries) used in data science, natural language processing, statistics, mathematics, data management (acquiring, cleaning, reshaping, organizing, persisting) and visualizations. This is ONLINE and ASYNCHRONOUS (there is no regular meeting day/time). Students who have completed INFO 490 RB Foundations of Data Science or INFO 490 RB2 Advanced Data Science should not register for this course as it will be considered duplicate credit (which does not count towards graduation).