FIRE - FIRST-YEAR INNOVATION & RESEARCH EXPERIENCE

FIRE120 FIRE SEMESTER 1 (3 Credits)
Engages the research process through the design, research, collaborative authorship and iterative review-based refinement of research proposals. Students find and analyze primary literature, think creatively, author and communicate research proposals in a scholarly fashion and work collaboratively to solve scientific and societal problems using technology, delegation and productive team communication.
Additional Information: This is the first course in the FIRE (First-Year Innovation & Research Experience) program sequence.

FIRE150 FIRE SEMESTER 2: Antibiotic Resistance (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Antibiotic Research research stream.
Recommended: FIRE120.

FIRE151 FIRE SEMESTER 2: Sustainability Analytics (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Sustainability Analytics research stream.
Recommended: FIRE120.

FIRE152 FIRE SEMESTER 2: Environmental Pathogens (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Environmental Pathogens research stream.
Recommended: FIRE120.

FIRE153 FIRE SEMESTER 2: Found In Translation (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Found In Translation research stream.
Recommended: FIRE120.

FIRE154 FIRE SEMESTER 2: Risk Communication & Resilience (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Risk Communication and Resilience research stream.
Recommended: FIRE120.

FIRE155 FIRE SEMESTER 2: Terrapin Genome Project (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Terrapin Genome Project research stream.
Recommended: FIRE120.

FIRE157 FIRE SEMESTER 2: Addiction Science (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Addiction Science research stream.
Recommended: FIRE120.

FIRE160 FIRE SEMESTER 2: Transgenerational Brain Initiative (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Transgenerational Brain Initiative research stream.
Recommended: FIRE120.
Restriction: Must be in the program FIRE.

FIRE162 FIRE SEMESTER 2: Once and Future Planet (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Once and Future Planet research stream.
Recommended: FIRE120.
Restriction: Must be in the program FIRE.

FIRE163 FIRE SEMESTER 2: Animal and Human Relationships (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Animal and Human Relationships research stream.
Recommended: FIRE120.
Restriction: Must be in the program FIRE.

FIRE164 FIRE SEMESTER 2: Autonomous Unmanned Systems (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Autonomous Unmanned Systems research stream.
Recommended: FIRE120.
Restriction: Must be in the program FIRE.

FIRE165 FIRE SEMESTER 2: Designing Innovations (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Designing Innovations research stream.
Recommended: FIRE120.

FIRE166 FIRE SEMESTER 2: Immunogenetics (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining this research group.
Recommended: FIRE120.

FIRE167 FIRE SEMESTER 2: Felons not Families (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Felons not Families research stream.
Recommended: FIRE120.

FIRE170 FIRE SEMESTER 2: Phillips Virtual Culture (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Phillips Virtual Culture research stream.
Recommended: FIRE120.

FIRE171 FIRE SEMESTER 2: Capital One Machine Learning (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Capital One Machine Learning research stream.
Recommended: FIRE120.

FIRE172 FIRE SEMESTER 2: Engineering Biosensors (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Engineering Biosensors research stream.
Recommended: FIRE120.

FIRE173 FIRE SEMESTER 2: Deep Brain Neurotech (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the Neural Systems research stream.
Recommended: FIRE120.

FIRE174 FIRE SEMESTER 2: African American Digital Humanities - Digital Archives (3 Credits)
FIRE SEMESTER 2 course for students in the FIRE program joining the African American Digital Humanities - Digital Archives research stream.
Recommended: FIRE120.

FIRE198 FIRE SEMESTER 2 (2 Credits)
This is the second course in the FIRE (First-Year Innovation & Research Experience) program sequence. Students in this course join a research stream and gain discipline-specific training in that lab. This course focuses on the concepts related to the process of independent research including collaboration with peers, communication of ideas, troubleshooting unexpected outcomes, and discipline-specific methodologies.
Recommended: FIRE120.
Repeatable to: 2.0 credits.

FIRE250 FIRE SEMESTER 3: Antibiotic Resistance (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Antibiotic Research research stream.
Prerequisite: FIRE150.
FIRE251 FIRE SEMESTER 3: Sustainability Analytics (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Sustainability Analytics research stream.
Prerequisite: FIRE151.

FIRE252 FIRE SEMESTER 3: Environmetal Pathogens (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Environmental Pathogens research stream.
Prerequisite: FIRE152.

FIRE253 FIRE SEMESTER 3: Found In Translation (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Found In Translation research stream.
Prerequisite: FIRE153.

FIRE254 FIRE SEMESTER 3: Risk Communication & Resilience (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Risk Communication and Resilience research stream.
Prerequisite: FIRE154.

FIRE255 FIRE SEMESTER 3: Terrapin Genome Project (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Terrapin Genome Project research stream.
Prerequisite: FIRE155.

FIRE257 FIRE SEMESTER 3: Addiction Science (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Addiction Science research stream.
Prerequisite: FIRE157.

FIRE260 FIRE SEMESTER 3: Transgenerational Brain Initiative (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Transgenerational Brain Initiative research stream.
Prerequisite: FIRE160.

FIRE262 FIRE SEMESTER 3: Once and Future Planet (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Once and Future Planet research stream.
Prerequisite: FIRE162.

FIRE263 FIRE SEMESTER 3: Animal and Human Relationships (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Animal and Human Relationships research stream.
Prerequisite: FIRE163.

FIRE264 FIRE SEMESTER 3: Autonomous Unmanned Systems (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Autonomous Unmanned Systems research stream.
Prerequisite: FIRE164.

FIRE265 FIRE SEMESTER 3: Designing Innovations (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Designing Innovations research stream.
Prerequisite: FIRE165.

FIRE266 FIRE SEMESTER 3: Immunogenetics (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining this research group.
Prerequisite: FIRE166.

FIRE267 FIRE SEMESTER 3: Felons not Families (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Felons not Families research stream.
Prerequisite: FIRE167.

FIRE270 FIRE SEMESTER 3: Phillips Virtual Culture (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Phillips Virtual Culture research stream.
Prerequisite: FIRE170.

FIRE271 FIRE SEMESTER 3: Capital One Machine Learning (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Capital One Machine Learning research stream.
Prerequisite: FIRE171.

FIRE272 FIRE SEMESTER 3: Engineering Biosensors (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Engineering Biosensors research stream.
Prerequisite: FIRE172.

FIRE273 FIRE SEMESTER 3: Deep Brain Neurotech (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the Deep Brain Neurotech research stream.
Prerequisite: FIRE173.

FIRE274 FIRE SEMESTER 3: African American Digital Humanities - Digital Archives (3 Credits)
FIRE SEMESTER 3 course for students in the FIRE program joining the African American Digital Humanities - Digital Archives research stream.
Prerequisite: FIRE174.

FIRE298 FIRE SEMESTER 3 (3 Credits)
Capstone course in the FIRE (First-Year Innovation & Research Experience) program sequence. Students in this course transition from trainee to practitioner in their lab. This course focuses on the concepts related to the process of independent research including collaboration with peers, communication of ideas, troubleshooting unexpected outcomes, and discipline-specific methodologies.
Prerequisite: FIRE198.
Repeatable to: 3 credits.