

CCRI CURRICULUM REVIEW COMMITTEE MEETING

April 23, 2021 2:00-4:00 PM

Zoom Meeting

MINUTES

1. CALL TO ORDER

Chairperson McColl called the meeting to order at 2:04 PM.

2. ROLL CALL

3. APPROVAL OF MINUTES

The committee voted 9 to 0, with 0 abstentions to **APPROVE** the minutes from the March 19, 2021 meeting.

4. NON ACTION/ANNOUNCEMENTS

5. ACTION/VOTING ITEMS

NON ACTION/ANNOUNCEMENTS

EXPERIMENTAL COURSE PROPOSAL ANNOUNCEMENTS:

The Biology Department is proposing:

1. Course Proposal BIOL 8XXX Food from the Sea 3 credits

The Social Sciences Department is proposing:

1. Course Proposal SOCS 8XXX First Year Seminar 3 credits

OTHER ANNOUNCEMENTS:

1. Curriculum Review Committee Fall 2021-Spring 2022 Calendar

ACTION/VOTING ITEMS

Revised Course Proposal: Entrepreneurship 1 – Introduction to Entrepreneurship

BUSN 1145, 3 credits

Originator: Christopher Ratcliffe

RATIONALE:

Rationale:

The purpose of this proposal is to submit a Name Change only

Name Change: From “Introduction to Entrepreneurship” to “Entrepreneurship 1: Introduction to Entrepreneurship”

CATALOG DESCRIPTION:

CURRENT:

This introductory course is designed to provide students with an overview of the skills and competencies needed to become an effective entrepreneur or intrapreneur, while also allowing them the opportunity to practice being an entrepreneur. Students will be exposed to concepts such as Design Thinking, Innovation, and Value Creation, as well as how to develop one’s own Entrepreneurial Mindset.

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the addition of missing information on page 3.

Revised Course Proposal: Entrepreneurship 2 – The Design Process

BUSN 1165, 3 credits

Originator: Christopher Ratcliffe

RATIONALE:

Rationale:

The purpose of this proposal is to submit a Name Change only

Name Change: From “The Design Process” to “Entrepreneurship 2: The Design Process”

CATALOG DESCRIPTION:

CURRENT:

This course will allow students to have a hands-on experience utilizing the Design Thinking process to identify, analyze and create opportunities for businesses and individuals. It examines key strategic issues related to new product development and will teach students to think strategically about innovation, development, and deployment utilizing a test and learn design process.

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the addition of missing information on page 3.

Revised Course Proposal: Entrepreneurship 3 – The Lean Startup

BUSN 1185, 3 credits

Originator: Christopher Ratcliffe

RATIONALE:

Rationale:

The purpose of this proposal is to submit a Name Change only

Name Change: From “The Lean Startup” to “Entrepreneurship 3: The Lean Startup”

CATALOG DESCRIPTION:

CURRENT:

The focus of this course is on developing a new business concept or idea and rapidly assessing its viability. You will be exposed to the concept of “thinking big but starting small” by utilizing the “test and learn” approach to lean startups which includes launching small experiments, prototyping rapidly and inexpensively, tolerating failures and learning from mistakes. (Prerequisite: BUSN 1165)

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the addition of missing information on page 3.

New Program Proposal: Cyber Defense Certificate

CSIP-CYBR, 22 credits

Originator: Michael Kelly

RATIONALE:

The CAE-CDE program was established by the National Security Agency (NSA) and the Department of Homeland Security (DHS) jointly to reduce vulnerability in national information infrastructure by promoting

higher education and research in Information Assurance/Cyber Defense (IA/CD) and to produce a growing number of professionals with expertise in the cybersecurity discipline. In pursuit of our CAE2Y designation we were required to create a core certification based on NSA approved knowledge units. We received our CAE2Y designation in August of 2018 and have been awarding this DSH/NSA approved certification to our students under this designation. This certificate would make it an official CCRI certification for our students.

CATALOG DESCRIPTION:

The Cyber Defense program is part of the Cybersecurity degree designed to provide students with a strong foundation in the principles and methods of cybersecurity, as well as the fundamental knowledge and tools for applying security measures across a variety of network architectures and settings. This certificate program will provide the educational background and hands-on training necessary to prepare students in the cybersecurity defense sector. The curriculum meets the National Security Agency (NSA) and Centers of Academic Excellence (CAE) core foundational content and standards.

Note: Students must earn a grade of at least C in all computer course requirements and must maintain a 2.0 GPA. Many courses require prerequisites, corequisites and/or testing.

The committee voted 9 to 0, with 0 abstentions to **APPROVE** the proposal.

New Course Proposal: Introduction to Teaching and Learning

HMNS 8101, 2 credits

Originator: Carol Patnaude

RATIONALE:

Students enrolled in education courses at CCRI who intend to transfer to Rhode Island College (RIC) should take HMNS 8101 at CCRI. All education/intended majors at RIC (e.g. ECED, ELED, Secondary Ed, HPE, Art, Music, SPED, etc.) are required to take and successfully complete FNED 101 prior to applying for admission to the school of education. This includes transfers from CCRI.

Providing the course at CCRI would allow the students to complete it earlier in their program (which is how it is offered at RI College) and would allow students who intend to transfer to RIC to become familiar with RIC and all education programs. This course also allows transfer students to apply to RIC's School of Education in a timelier manner.

HMNS 8101: Introduction to Teaching and Learning has been offered for two semesters as a pilot. The course has proven to be successful.

CATALOG DESCRIPTION:

NEW:

Students construct a map for their journey of developing a professional educator identity. Students explore essential questions of social justice education through academic and field experiences. Topics include Key Concepts of Social Justice Education, Racism, Classism, Religious Oppression, Sexism, Ableism, Adulthood and Advocacy.

The committee voted 7 to 0, with 1 abstention to **APPROVE** the proposal with the removal of the prerequisite on page 4 and indicating hybrid as a location where the course will be offered on page 9.

New Course Proposal: Mathematics for Elementary School Teachers II

MATH 1144, 4 credits

Originator: Bethany Hopkins, Justin Moniz

RATIONALE:

Mathematics 1144 is the second of a two-course sequence for students in the elementary education curriculum. This course focuses on the nature of mathematical thinking and concepts as they relate to the areas of statistics, probability, and geometry and measurement. It is neither a review of elementary school mathematics nor simply a study of procedures or a venue to practice skills. Since elementary school teachers need to possess a profound understanding of the mathematics they will teach, a major goal of the course is to increase their ability to abstract, generalize, and apply the course content to problem-solving situations as well as to develop a deeper understanding of the content. Knowing mathematics for teaching requires a richer, deeper, and more encompassing view of mathematics than is required for knowing mathematics for oneself.

CCRI will approach this course in the precise manner in which it is done at RIC.

RIC APPROACH:

The economic well-being of our country depends heavily upon an informed and educated population especially in the field of mathematics. The importance of mathematical literacy for all students, both in everyday life and in the workplace, has never been greater. The contemporary vision is that all students should have the opportunity to learn more mathematics at a deeper level. Realizing this vision of high-quality mathematics education for all students, as described in the National Council of Teachers of Mathematics (NCTM) Principles in Standards for School Mathematics, which requires the active participation of everyone in the education community. In the recent recommendations of the Mathematical Science Education Board (MSEB) mathematics departments should possess three broad objectives for students learning: competence in the subject area, exploration and understanding with an emphasis on active learning, and a constructivist perspective on learning.

Students enrolled in Mathematics 144 (MATH 1144 at CCRI) possess a wide variety of and diversity in learning styles and dispositions in mathematics. The instructor should be aware of these and encourage each student to continue to develop and refine a learning style that is effective for her/him. Attention to disposition is particularly important in the Math 144 course since many of the enrolled students will become classroom teachers with a responsibility to teach mathematics themselves; in many cases the teachers' disposition of the subject is inherited by their students. Considering the wide range of mathematics backgrounds and interests, the instructor is encouraged to maximize the opportunity for student input, engagement, and feedback. A variety of teaching techniques that prove to be helpful include the use of activities in which students investigate, discover, and generalize.

Mathematics learning involves a sequence of stages: intuitive, concrete, semi-concrete, and abstract. To ensure conceptual development, the use of manipulatives and technology is highly recommended. This multi-representational approach assists students in building their self-confidence, enhancing their understanding and empowering them to solve problems on their own.

CATALOG DESCRIPTION:

NEW:

A continuation of MATH 1143, this course includes geometry and measurement, counting problems, probability, and statistics.

Prerequisite: MATH 1143 with a grade of C or better

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal.

Revised Course Proposal: Music After 1750

MUSC 1060, 3 credits

Originator: Joseph Amante

RATIONALE:

The current course description in the college catalog dates from the 1960s, when it was appropriate to say it covers music through the first half of the 20th century. To keep the course description accurate and relevant to the present, the catalog description needs to be revised to acknowledge the period over half a century later. Current textbooks cover music up to the present time, and in order for music majors to transfer the credits to equivalent courses at URI, the students need to have studied the entire 20th century and beyond. (Galant is a preferred term now for Rococo in music.)

CATALOG DESCRIPTION:

OLD:

This course covers the history of music of the Rococo, Classical, Romantic and early 20th century periods with cultural correlations to the periods. Special emphasis is placed on intensive listening. Lecture: 3 hours, Fall semester

NEW:

This course covers the history of music of the Galant, Classical, Romantic, 20th century and early 21st century periods with cultural correlations to the periods. Special emphasis is placed on intensive listening. Lecture: 3 hours, Fall semester

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal.

Revised Course Proposal: The Solar System

ASTR 1010, 4 credits

Originator: Roger Hart

RATIONALE:

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:

OLD:

Major topics covered in this course are the historical development of astronomical understanding, concepts of the celestial sphere, the technology of astronomical observations, modern planetary science derived from the space program, small bodies of the solar system and the origin and evolution of the solar system. Evening observing sessions are included as an optional part of the course (clear skies permitting). Note: This course fulfills one lab science requirement for the A.A. Degree. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

This course covers the fundamentals of planetary astronomy. Topics emphasized in this course are the historical development of astronomical understanding, concepts of the celestial sphere, the technology of astronomical observations, modern planetary science derived from the space program, comparative planetology, and the origin and evolution of the solar system. Evening observing sessions are included as an optional part of the

course (clear skies permitting). Note: Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 2 hours – In-Person Lab Fee: \$20

The committee voted 8 to 0, with 0 abstention to **APPROVE** the proposal with the change in actual meeting time hours to 4 hours and 30 minutes.

Revised Course Proposal: The Stellar System

ASTR 1020, 4 credits

Originator: Roger Hart

RATIONALE:

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:

OLD:

This course includes the study of the science of analyzing radiation that reaches Earth from extraterrestrial objects; the sun; stellar properties; the life cycles of stars; systems containing more than one star including clusters and galaxies, extraordinary objects such as neutron stars, pulsars, black holes and quasars; and the origin and evolution of the universe. Evening observing sessions are included as an optional part of the course (clear skies permitting). Note: This course fulfills one lab science requirement for A.A. Degree. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

This course includes the study of the science of analyzing radiation that reaches Earth from extraterrestrial objects; the sun; stellar properties; the life cycles of stars; systems containing more than one star including clusters and galaxies, extraordinary objects such as neutron stars, pulsars, black holes and quasars; and the origin and evolution of the universe. Evening observing sessions are included as an optional part of the course (clear skies permitting). Note: Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 2 hours – In-Person Lab Fee: \$20

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the change in actual meeting time hours to 4 hours and 30 minutes.

Revised Course Proposal: Introduction to Geology – How the Earth Works

GEOL 1010, 4 credits

Originator: Emily Burns, Karen Kortz, Paul White

RATIONALE:

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:

OLD:

This course investigates the planet Earth, explaining the geologic events and features through plate tectonics. Major topics included are the study of minerals and rocks; volcanoes; earthquakes; weathering and erosion; streams and floods; and groundwater. In addition, a field trip to localities in Rhode Island and the vicinity is taken. Course fulfills one lab science requirement for A.A. degree. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

This course investigates the processes that form and change Earth with plate tectonics as a central theme. It takes an Earth Systems Science approach to develop an understanding of the interactions of the Earth's major systems. Major topics include the study of plate tectonics; minerals and rocks; volcanoes, earthquakes, tsunamis, and natural disasters; mountain building; river systems; coastal environments; global climate change, glaciation, and sea level change; and groundwater. In addition, students learn about Earth's natural resources, their uses, and associated environmental issues. Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

The committee voted 8 to 0, with 0 abstention to **APPROVE** the proposal with the change in actual meeting time hours to 4 hours and 30 minutes.

Revised Course Proposal: The Earth Through Time**GEOL 1020, 4 credits****Originator: Emily Burns, Karen Kortz, Paul White****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course investigates the geological history of the Earth. Topics include plate tectonics; climate change, such as the Ice Age; and the evolution of life (e.g. dinosaurs). A key goal is to learn how these topics have interacted through time resulting in the present location of our continents, oceans, and present day life. Off-campus field trips to Rhode Island locations are usually scheduled. - Lab Fee: \$20

NEW:

This course investigates the geological and biological history of the Earth. Students use the history recorded in rocks to interpret how and why Earth's past landscapes and life have changed over geologic time. Major topics include plate tectonics; the rock cycle; past climates, including the Ice Age; the fossil record; and evolution and extinction, including the extinction of the dinosaurs. The course explores how these topics have interacted through time resulting in today's landscapes, oceans, and life. An off-campus field trip to a geologically interesting location is usually scheduled. Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the change in actual meeting time hours to 4 hours and 30 minutes..

Revised Course Proposal: Natural Disasters**GEOL 1030, 3 credits****Originator: Emily Burns, Karen Kortz, Paul White****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:

OLD:

This course studies the earth by focusing on natural disasters. The causes and consequences of such events are examined within the framework of earth sciences. Major topics covered include earthquakes, volcanoes, tsunami, landslides, climate change, hurricanes, floods and meteorite impacts. Lecture: 3 hours

NEW:

This course studies the Earth by focusing on natural disasters. It examines causes and consequences of such events within the framework of earth science. Major topics include earthquakes, volcanoes, tsunami, landslides, climate change, hurricanes, severe weather, and floods. Students examine how natural processes and human activities can combine to exacerbate natural disasters and recommend strategies for minimizing the effects of disasters on people. Completion of this course satisfies a free elective requirement in the liberal arts and general studies programs. Lecture: 3 hours

The committee voted 8 to 0, with 0 abstentions to **APPROVE** the proposal with the change in actual meeting time hours to 2 hours and 30 minutes.

Revised Course Proposal: Introduction to Geographic Information Systems (GIS)**GEOL 1040, 3 credits****Originator: Emily Burns****RATIONALE:**

This course is being revised to match the newest SLOs and to update the catalog description.

CATALOG DESCRIPTION:**OLD:**

This course is an introduction to using ArcGIS 9.3 to create and analyze digital maps. Students learn how to use the software to create maps, graphs, and reports. Basic cartography, coordinate systems, geodesy, map projections, and map design are also covered. Students complete and present a final mapping project on a topic of their choosing. Lecture: 2 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

This course is an introduction to using ArcGIS desktop and online software to create and interpret digital maps. Students learn how to import data and use the software to create maps, graphs, and reports; use maps to solve problems and answer questions; and present map data. Basic cartography, coordinate systems, geodesy, map projections, and map design are also covered. Students complete and present a final mapping project on a topic of their choosing. Lecture: 1 hour. Lab: 2 hours - Lab Fee: \$20

The committee voted 6 to 0, with 1 abstention to **TABLE** the proposal.

The following proposals were not discussed at the meeting due to the meeting end time. They will be revisited at a future Curriculum Review Committee Meeting.

Revised Course Proposal: Urban Geology**GEOL 1050, 4 credits****Originator: Emily Burns****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course explores the relationship of cities to their natural settings. The Earth's surface features, geological processes, and internal structure are explored, including plate tectonics, earthquakes, volcanoes, the rock cycle, rivers, and mass wasting. These and more are investigated in terms of their effect on urban areas. Topics include building stone, water supply, sanitation, population growth, and megacities in the developing world. There will be a field trip to look at stone buildings in Providence or Newport. Lecture: 3 hours, Lab: 2 hours

NEW:

This course covers basic concepts of geology including plate tectonics, earthquakes, volcanoes, the rock cycle, rivers, and mass wasting. It uses these concepts to explore how cities and their natural settings interact. Topics include the availability and properties of building materials; water supplies and sanitation; fossil fuels and climate change; and population growth and megacities in the developing world. There is a field trip to look at stone buildings in Providence. Lecture: 3 hours. Lab: 2 hours

Revised Course Proposal: Introduction to Oceanography**OCEN 1010, 3 credits****Originator: Emily Burns, Karen Kortz, Paul White****RATIONALE:**

Gen Ed course, revised SLOs, updated description

CATALOG DESCRIPTION:**OLD:**

This course is a study of the marine environment describing principles of physical, chemical, biological and geological oceanography. Topics include the origin of oceans; the composition and history of seawater; oceanic currents, tides, waves and beaches; the sea floor; plant and animal life in the sea; oceanic resources and food; and marine pollution.

NOTE: Completion of both OCEN 1010 and OCEN 1030 will satisfy one laboratory science requirement in the liberal arts and general studies programs at CCRI and the combination will transfer to URI and RIC as a general education course. Lecture: 3 hours (OCEN 1010); Lab: 2 hours (OCEN 1030)

NEW:

This course is a study of the marine environment. It focuses on the interdisciplinary nature of oceanography by exploring the principles of geological, physical, chemical, and biological oceanography. Topics include the origin of oceans; the composition and history of seawater; oceanic currents, tides, and waves; coastlines and coastal processes; the sea floor; plant and animal life; oceanic resources; marine pollution; and the causes and consequences of climate change as related to the oceanic environment.

Note: Completion of both OCEN 1010 and OCEN 1030 satisfy one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours

Revised Course Proposal: Oceanography Laboratory**OCEN 1030, 3 credits****Originator: Emily Burns, Karen Kortz, Paul White****RATIONALE:**

Gen Ed course, revised SLOs, updated description

CATALOG DESCRIPTION:**OLD:**

This lab course emphasizes topics covered in OCEN 1010 (Introduction to Oceanography) such as ocean life, sediments, salinity, currents and plate tectonics. It allows a more hands-on approach to learning. Note: Completion of both OCEN 1010 AND OCEN 1030 will satisfy one laboratory science requirement in the Liberal Arts and General Studies programs. Lab: 2 hours - Lab Fee: \$10

NEW:

This lab course emphasizes topics covered in Introduction to Oceanography (OCEN 1010). Laboratory exercises explore the interdisciplinary nature of oceanography. Topics include how and why life in the ocean has changed over time; the taxonomy and habitats of common marine organisms; the effects of human activities including nutrient pollution, climate change, and invasive species; the seafloor; alternative oceanic energy resources; and the collection and interpretation of scientific data from various sources, e.g. online, in the field, and the laboratory. Note: Completion of both OCEN 1010 and OCEN 1030 satisfy one laboratory science requirement in the Liberal Arts and General Studies programs. Lab: 2 hours – In-Person Lab Fee: \$20

Revised Course Proposal: Physics of Everyday Life**PHYS 1000, 4 credits****Originator: Alwyn D'Souza****RATIONALE:**

This course is being revised in effort to update the SLOs, and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course is for students not majoring in science. Physical principles are presented with emphasis on non-quantitative, practical applications of these concepts. Note: This course satisfies one semester of the science requirement for the Associate in Arts degree. (Prerequisite: Basic knowledge of algebra) Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

Physical principles including mechanics, heat, waves, and electricity are presented with emphasis on practical applications of these concepts. (Prerequisite: Basic knowledge of algebra) Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 2 hours - Lab Fee: \$20

Revised Course Proposal: General Physics I**PHYS 1030, 4 credits****Originator: D. Matthew Rieger****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

Mechanics and heat are studied as the basic topics of this course. One lecture hour is used as a help session. (Prerequisite: High school algebra AND trigonometry) Lecture: 4 hours, Lab: 3 hours

NEW:

This is an algebra and trigonometry-based physics course that covers topics and experiments in mechanics, gravity, fluids, and thermal physics. This course includes a one-hour recitation. (Strongly suggest prerequisite: high school/college algebra and trigonometry) Completion of this course satisfies one laboratory science requirement in the liberal arts and general studies programs. Lecture: 3 hours, Lab: 3 hours, Recitation: 1 hour. – Lab Fee: \$20

Revised Course Proposal: General Physics II**PHYS 1040, 4 credits****Originator: Melissa Lancellotta****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

Sound, electricity and magnetism, light, atomic and nuclear theories and their applications are studied in this course. (Prerequisite: PHYS 1030 with a grade of "C" or better) Lecture: 3 hours, Lab: 3 hours - Lab Fee: \$20

NEW:

This is an algebra and trigonometry-based physics course that covers topics and experiments in sound, electricity, magnetism, electromagnetism, and optics. (Prerequisite: PHYS 1030 with a grade of "C" or better) Lecture: 3 hours, Recitation 1 hour, Lab: 3 hours – Lab Fee: \$20

Revised Course Proposal: Introduction to Renewable Energy**PHYS 1070, 3 credits****Originator: Melissa Lancellotta****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course will introduce renewable energy resources and their applied technologies to the student. Students will learn the physics of energy, as well as, the geology of energy. Topics covered will include, solar, geothermal, tidal, and wave energy, as well as, hydro-electric energy. Lecture: 2 hours, Lab: 2 hours - Lab Fee: \$20

NEW:

This course introduces renewable energy resources and their applied technologies. Students will learn the physics and geology of energy. Topics covered include solar, wind, geothermal, and hydroelectric energy. Lecture: 2 hours, Lab: 2 hours - Lab Fee: \$20

Revised Course Proposal: University Physics I**PHYS 1150, 3 credits****Originator: Mohammad H. Alizadeh**

RATIONALE:

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course introduces Newtonian mechanics; including kinematics and dynamics of a particle, rotation of rigid bodies, oscillatory motion, and conservation principles. (Pre- or corequisite: MATH 2141) [Need passing credit in PHYS 1150 and 1151 to fulfill general education requirement.] Lecture: 3 hours

NEW:

This course introduces Newtonian mechanics; including kinematics and dynamics of a particle, rotation of rigid bodies, gravity, oscillatory motion, conservation principles in mechanics, and fluid mechanics. (Pre- or corequisite: MATH 2141) Lecture: 3 hours, Recitation: 1 hour

Revised Course Proposal: University Physics II**PHYS 1500, 3 credits**

Originator: Hossein Alizadeh, Basile Panoutsopoulos, D. Matthew Rieger

RATIONALE:

This course is being revised to update the SLOs, course description, and to change the course title and number to more accurately reflect the content of the course.

CATALOG DESCRIPTION:**OLD:**

This basic course in electrical engineering includes a study of static, electric and magnetic fields, Coulomb's laws, capacitance and inductance, Gauss' Law, Ampere's Law, electrical current and voltage. (Prerequisites: MATH 2141 and PHYS 1100 or equivalent) Lecture: 3 hours

NEW:

This course is an introduction to electricity and magnetism. Topics covered include electric charges, electric fields and Gauss' law; magnetic fields and Ampere's law, capacitance and inductance, DC and AC circuits, Maxwell's equations and electromagnetic waves. (Prerequisites: MATH 2141 and PHYS 1150) Lecture: 3 hours; Recitation: 1 hour

Revised Course Proposal: University Physics II Lab**PHYS 1501, 1 credit**

Originator: Hossein Alizadeh, Basile Panoutsopoulos, D. Matthew Rieger

RATIONALE:

This course is being revised to update the SLOs, course description, and to change the course title and number to more accurately reflect the content of the course.

CATALOG DESCRIPTION:**OLD:**

Laboratory exercises reinforce the theory learned in the Introduction to Electrical Engineering course. Use of various electronic instruments to make measurements is an important part of the lab. (Prerequisite or Corequisite: ENGR 2150) Lab: 3 hours

NEW:

This course includes laboratory experiments in the fields of electricity and magnetism; including electrical charges, electric and magnetic fields and basic circuits, which are covered in PHYS 1500. (Prerequisite or Corequisites: PHYS 1500) Lab: 3 hours - Lab Fee: \$20

Revised Course Proposal: University Physics III**PHYS 2000, 3 credits****Originator: Mohammad H. Alizadeh****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course deals in the fundamentals of acoustics and optical phenomena and introduces topics of thermodynamics, kinetic theory and wave motion. Calculus is used. Note: Usually taken by engineering students in the first semester of the second year. Calculus is used. (Prerequisite: PHYS 1100 or equivalent AND MATH 2141, 2142 or equivalent or instructor's permission) Lecture: 3 hours

NEW:

This is a calculus-based physics course that covers topics in oscillations, waves, acoustics, ray and wave optics, kinetic theory of gases, and thermodynamics. This course includes an hour of recitation. (Prerequisite: PHYS 1150 and MATH 2141, 2142) Lecture: 3 hours, Recitation: 1 hour

Revised Course Proposal: University Physics III Lab**PHYS 2001, 1 credit****Originator: Mohammad H. Alizadeh****RATIONALE:**

This course is being revised in effort to update the SLOs to meet the Educated Person Policy and to update the course description.

CATALOG DESCRIPTION:**OLD:**

This course deals with laboratory experiments in simple harmonic motion, sound waves, reflection and refraction of light, lenses, prisms, diffraction of light, holography and some fiber optic systems. (Prerequisite or corequisite: PHYS 2110 or equivalent) Lab: 3 hours - Lab Fee: \$20

NEW:

This course deals with laboratory experiments in simple harmonic motion, sound waves, reflection and refraction of light, lenses, prisms, diffraction and interference of light. (Prerequisite or corequisite: PHYS 2000) Lab: 3 hours - Lab Fee: \$20