|  |  |
| --- | --- |
| For Academic Affairs and Research Use Only | |
| Proposal Number: |  |
| CIP Code: |  |
| Degree Code: |  |

**Course Deletion Proposal Form**

**[X] Undergraduate Curriculum Council**

**[ ] Graduate Council**

Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | David F. Gilmore | 1/2/2021 |   **Department Curriculum Committee Chair** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **COPE Chair (if applicable)** |
| |  |  | | --- | --- | | Stephen J. Mullin | 2/2/2021 |   **Department Chair** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Head of Unit (if applicable)** |
| |  |  | | --- | --- | | John Hershberger | 2/9/2021 |   **College Curriculum Committee Chair** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Undergraduate Curriculum Council Chair** |
| |  |  | | --- | --- | | Lynn Boyd | 2/12/2021 |   **College Dean** | |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **Graduate Curriculum Committee Chair** |
| |  |  | | --- | --- | | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Enter date |   **General Education Committee Chair (if applicable)** | |  |  | | --- | --- | | Alan Utter | 3/15/2021 |   **Vice Chancellor for Academic Affairs** |

1. **Course Title, Prefix and Number**

BIO 4223 Human Endocrinology

1. **Contact Person** (Name, Email Address, Phone Number)

Lori Neuman-Lee

[lneumanlee@astate.edu](mailto:lneumanlee@astate.edu)

870-972-3111

1. **Justification**

This course will be replaced with a new course (Vertebrate Endocrinology) which will have similar content. Therefore, Human Endocrinology will no longer be taught.

1. **Last semester course will be offered**

Spring 2020.

1. YES **Does this course appear in your curriculum? (if yes, and this deletion changes the curriculum, a Program Modification Form is required)**

Enter text...

1. **Yes / No Is this course dual-listed (undergraduate/graduate)?**

NO

1. No **Is this course cross-listed with a course in another department?**

If yes, which course(s)?

No

1. NO **Is there currently a course listed in the Bulletin or Banner which is a one-to-one equivalent to this course (please check with the Registrar’s Office if unsure)?**

If yes, which course?

Enter text...

**Bulletin Changes**

|  |
| --- |
| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Please include a before (with changed areas highlighted) and after of all affected sections.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.** |

BIO 4163. Laboratory in BioTechniques II Laboratory techniques in DNA/RNA isolation, analysis and applications, including PCR, reverse transcriptase PCR, recombinant DNA and the production of gene expression products. Laboratory 8 hours per week. Special course fees may apply. Prerequisite, BIO 4153. Spring.

BIO 4173. Molecular Biology Fundamental principles of molecular biology and their application. Emphasis on integrating technologies, past and present, to explore gene structure, regulation and function in driving biological processes. Prerequisite, BIO 3013 or instructor permission. Spring.

BIO 4201. Issues in Human Ecology Laboratory    Two hours per week. To be taken concurrently with BIO 4202. Special course fees may apply. Summer, odd.

BIO 4202. Issues in Human Ecology    A broad ecological approach demonstrating problems of modern society such as environmental deterioration, hunger, and resource depletion. Lecture two hours per week. Special course fees may apply. Summer, odd.

BIO 4213. Human Genetics    Current advances in the understanding of the human genome. Lecture three hours per week. Prerequisite, BIO 3013. Special course fees may apply. Fall, odd.

BIO 4223. Human Endocrinology Control of physiological processes by hormones. Types of chemical messengers, impact on cells, tissues and organs, and interrelationships of organ systems with respect to hormones will be studied. Important endocrine disorders will also be addressed. Special course fees may apply. Prerequisites, BIO 2013 or CHEM 4243, AND BIO 2223 and BIO 2221 or BIO 3233 and BIO 3231. Spring.

BIO 4301. Aquatic Entomology    Identification, life histories, and ecology of aquatic arthropods, with emphasis on freshwater insects. For students in wildlife management, fisheries management, aquatic biology, and advanced entomology. Lecture one hour per week. Special course fees may apply. Prerequisites, BIO 3301, BIO 3303, and BIO 3123 or BIO 4371 and BIO 4373. Spring, odd.

BIO 4302. Aquatic Entomology Laboratory    Four hours per week. Special course fees may apply. To be taken concurrently with BIO 4301. Spring, odd.

BIO 4311. Fisheries Biology    Identification, ecology, food habits, management, and behavior of fishes. Lecture one hour per week. Special course fees may apply. Prerequisites, BIO 1303 and BIO 1301. Summer, even.

BIO 4312. Fisheries Biology Laboratory    Four hours per week. To be taken concurrently with BIO 4311. Special course fees may apply. Summer, even.

BIO 4322. Marine Mammals Laboratory    Hands on experience on the classification, anatomy, and behavior of marine mammals. Concurrent enrollment in BIO 4323. Special course fees may apply. Instructor permission required. Spring, odd.

BIO 4323. Biology of Marine Mammals    This course analyzes the biology of marine mammals based on their adaptations to the aquatic environment from evolutionary, anatomical, physiological, and ecological perspectives. Special course fees may apply. Prerequisites will be at least two the following courses, BIO 3312, BIO 4352, BIO 4653, BIO 3023, or BIO 3033. Instructor permission required. Spring, odd.

BIO 4332. Animal Histology    Cells and tissues of the organ systems of vertebrates. Lecture two hours per week. Special course fees may apply. Prerequisites, BIO 3302 and BIO 3312. Spring.

BIO 4333. Marine Biology    Overview of the diverse discipline of marine biology. Emphasis on life history but will incorporate aspects of chemistry, microbiology, molecular biology, and ecology of marine systems. Also includes marine fisheries, conservation biology, aquaculture, pharmacology, resource management, and public policy. Special course fees may apply. Prerequisites, BIO 1303 and BIO 1301 or BIOL 1003 and 1001, and BIO 3023, or instructor permission. Dual listed BIO 5333. Spring, even.

BIO 4341. Animal Embryology Laboratory    Two hours per week. Special course fees may apply. To be taken concurrently with BIO 4343. Spring.

New Bulletin Page:

BIO 4163. Laboratory in BioTechniques II Laboratory techniques in DNA/RNA isolation, analysis and applications, including PCR, reverse transcriptase PCR, recombinant DNA and the production of gene expression products. Laboratory 8 hours per week. Special course fees may apply. Prerequisite, BIO 4153. Spring.

BIO 4173. Molecular Biology Fundamental principles of molecular biology and their application. Emphasis on integrating technologies, past and present, to explore gene structure, regulation and function in driving biological processes. Prerequisite, BIO 3013 or instructor permission. Spring.

BIO 4201. Issues in Human Ecology Laboratory    Two hours per week. To be taken concurrently with BIO 4202. Special course fees may apply. Summer, odd.

BIO 4202. Issues in Human Ecology    A broad ecological approach demonstrating problems of modern society such as environmental deterioration, hunger, and resource depletion. Lecture two hours per week. Special course fees may apply. Summer, odd.

BIO 4213. Human Genetics    Current advances in the understanding of the human genome. Lecture three hours per week. Prerequisite, BIO 3013. Special course fees may apply. Fall, odd.

BIO 4301. Aquatic Entomology    Identification, life histories, and ecology of aquatic arthropods, with emphasis on freshwater insects. For students in wildlife management, fisheries management, aquatic biology, and advanced entomology. Lecture one hour per week. Special course fees may apply. Prerequisites, BIO 3301, BIO 3303, and BIO 3123 or BIO 4371 and BIO 4373. Spring, odd.

BIO 4302. Aquatic Entomology Laboratory    Four hours per week. Special course fees may apply. To be taken concurrently with BIO 4301. Spring, odd.

BIO 4311. Fisheries Biology    Identification, ecology, food habits, management, and behavior of fishes. Lecture one hour per week. Special course fees may apply. Prerequisites, BIO 1303 and BIO 1301. Summer, even.

BIO 4312. Fisheries Biology Laboratory    Four hours per week. To be taken concurrently with BIO 4311. Special course fees may apply. Summer, even.

BIO 4322. Marine Mammals Laboratory    Hands on experience on the classification, anatomy, and behavior of marine mammals. Concurrent enrollment in BIO 4323. Special course fees may apply. Instructor permission required. Spring, odd.

BIO 4323. Biology of Marine Mammals    This course analyzes the biology of marine mammals based on their adaptations to the aquatic environment from evolutionary, anatomical, physiological, and ecological perspectives. Special course fees may apply. Prerequisites will be at least two the following courses, BIO 3312, BIO 4352, BIO 4653, BIO 3023, or BIO 3033. Instructor permission required. Spring, odd.

BIO 4332. Animal Histology    Cells and tissues of the organ systems of vertebrates. Lecture two hours per week. Special course fees may apply. Prerequisites, BIO 3302 and BIO 3312. Spring.

BIO 4333. Marine Biology    Overview of the diverse discipline of marine biology. Emphasis on life history but will incorporate aspects of chemistry, microbiology, molecular biology, and ecology of marine systems. Also includes marine fisheries, conservation biology, aquaculture, pharmacology, resource management, and public policy. Special course fees may apply. Prerequisites, BIO 1303 and BIO 1301 or BIOL 1003 and 1001, and BIO 3023, or instructor permission. Dual listed BIO 5333. Spring, even.

BIO 4341. Animal Embryology Laboratory    Two hours per week. Special course fees may apply. To be taken concurrently with BIO 4343. Spring.