

**Section 1. Proposed Course Outline** (A general statement of course content that informs class syllabus construction. Once approved, all sections of a given course must include this content, no matter which instructor teaches the course, or the mode of delivery. Divisions must include this new course outline in the Divisional Course Outline binder as required by COPPs.)

Course Number: **EXMS120** Full Course Title for print catalog: Research Methods in Exercise Science

Abbreviated Course Title for Banner: **RESCH METHODS IN EXERCISE SCI**  (30 character limit)

Prerequisites: Program admission, EXMS 196, EXMS 194S, EXMS 194X

Co-requisites: EXMS 295, EXMS 194T

Grade Option: X Graded (with P/NP option)   Pass/No Pass only

|  |  |  |  |
| --- | --- | --- | --- |
| **Number/Type Credits** | **Term Minimum Contact** | **Term Maximum Contact** | **11-Week Term Contact** |
| 2 Lecture | 20 hours (lecture credits x 10) | 24 hours (lecture credits x 12) | 22 hours (lecture credits x 11) |
| 1 Lec/Lab | 20 hours (lec-lab credits x 20) | 24 hours (lec-lab credits x 24) | 22 hours (lec-lab credits x 22) |
| Lab | hours (lab credits x 30) | hours (lab credits x 36) | hours (lab credits x 33) |
| 3 **Total credits (sum)** | **40 Total hours (sum)** | 48 **Total hours (sum)** | 44 **Total hours (sum)** |

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| **Course Description (300 character limit):** | | | |
| This class focuses on the scientific process that shapes the field of exercise science. We will use quantitative data to address questions in exercise epidemiology. Students will gain experience working with primary research, evaluating information quality, and developing evidence- based conclusions. | | | |
| **Course Outcomes and Proficiencies** | | | **Assessments Planned** |
| What will the student ***know*** or ***be able to do*** at the end of the course?  What ***attitudes*** related to the subject will the student hold? | | What evidence will demonstrate that students have achieved course outcomes? (assessment tools may include departmental tests, written products, portfolios, juried performances, quizzes and exams, or alternative assessments such as qualitative studies, capstone projects, external reviewers, etc.) | |
| **Upon successful completion of this course, the student will:** | **How each outcome will be assessed:** | | |
| Describe how research shapes the field of exercise science. Understand the scientific method. | Case studies, labs, projects, quizzes or exams | | |
| Interpret graphical information, tables, and other quantitative information related to exercise science. | Case studies, labs, projects, quizzes or exams | | |
| Produce simple graphs and tables to present results. | Labs, projects, quizzes or exams | | |
| Describe current patterns of exercise and relate to population health | Case studies, labs, projects, quizzes or exams | | |
| Discuss information quality, identify primary vs. secondary literature, find necessary reference material | Case studies, labs, projects | | |
| Think critically and use evidence to support conclusions on topics in exercise science. Communicate results in a format appropriate to science. | Case studies, projects | | |
|  |  | | |

**Course Content by Major Topics**What topics will be presented? What are the main activities of the course? What are the central themes?

(See sample at <http://www.lanecc.edu/copps>

**Topics:**

The scientific method

Basic experimental design

Interpreting and presenting quantitative data in exercise science

Examples of research in exercise science (A selection of case studies that includes discussion of context, trials and tribulations. Possible cases: Framingham Heart Study, concussion research, ongoing local projects)

Evidence for the benefits of exercise

Patterns of exercise activity and health (Exercise epidemiology)

Current topics in exercise science

Effective communication in the sciences

**Section 2. Proposal Informati**

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| --- | --- | --- |
| **Course Developer:** | **Type of Proposal** | **Type of Course:** |
| Lisa Turnbull | XNew course | Lower Division Collegiate (transfer) |
| Date: 2/19/14 | Currently 199 or 299 | Professional/Technical (required or elective) |
| Catalog year to take effect: | Experimental Course | Developmental, numbered below 100 |
| 2014-2015\_\_\_ | 199 Special Studies |  |
| 2015-2016 X | 299 Trends |  |
|  | Revised course (If increasing credits, use credit change form) | |
|  | Reactivated course with no change | |
|  | Reactivated course with changes | |

**Rationale:**

|  |
| --- |
| How does this proposal further the goals of the program or department? |
| This course provides essential background on the nature and process of science for students entering a science field. Experience interpreting quantitative data and using information literacy skills will aid students in advanced classes in the EXMS program and encourage critical evaluation of new information in a rapidly changing field. |
| What assessment evidence supports this proposal? |
| Discussion among program staff has identified the need for this course to address gaps in the current EXMS program. |
| How do you know there is a demand for this course? |
| EXMS program classes are filled by program students. This course will be required. |

**Section 3. Curriculum Equity** [**http://www.lanecc.edu/copps**](http://www.lanecc.edu/copps)

**To promote an environment where all learners are encouraged to develop their full potential, this course will support Lane’s Curriculum Equity policy in the following way(s):**

-This course incorporates exercise epidemiology, which includes health patterns from people with diverse backgrounds.

-In case studies, care will be taken to recognize the contribution of all scientists. Where possible cases will be selected to represent the contributions of scientists from different ethnicities and genders (For example a concussion case study may be used that includes scientists of diverse ethnicity both genders).

-Learners with different styles will be supported with course material presented in multiple formats.

**Section 4. For revised courses only: PREVIOUS Catalog/Course Information:**

Course Number: Course Title in Banner: (30 characters maximum)

Full Course Title in print catalog:

Prerequisites:

Co-requisites:

Grade Option:  Graded (with P/NP option)  Pass/No Pass only

|  |  |  |  |
| --- | --- | --- | --- |
| **Number/Type Credits** | **Term Minimum Contact** | **Term Maximum Contact** | **11-Week Term Contact** |
| Lecture | hours (lecture credits x 10) | hours (lecture credits x 12) | hours (lecture credits x 11) |
| Lec/Lab | hours (lec-lab credits x 20) | hours (lec-lab credits x 24) | hours (lec-lab credits x 22) |
| Lab | hours (lab credits x 30) | hours (lab credits x 36) | hours (lab credits x 33) |
| **Total credits (sum)** | **Total hours (sum)** | **Total hours (sum)** | **Total hours (sum)** |

**Course Description:**

What will change? Course Number Title Course Description Credit hours Contact hours

**Section 5. Support Courses (New Professional/Technical course proposals must complete.)**

Professional/Technical courses are tracked within programs for purposes of Carl Perkins funding and budgetary planning. Indicate all degree or certificate programs for which this course will be required.

|  |  |
| --- | --- |
| Program | Division |
| Exercise and Movement Science | Health, Athletics, and PE |
|  |  |

**Section 6. Overlap Courses (New course proposals must complete.)**

While overlap of course materials is not necessarily a flaw, duplication of course materials may lead to inefficient use of college resources. If there is overlap, the faculty of overlapping courses must agree on the extent of overlap and attach a rationale explaining its necessity.

Indicate all departments/courses that this course may overlap. Division Dean of existing course enters one of two options at right. Note: N/A is not an option.

Options:

1. No overlap.

2. Approved: overlap is acceptable. Rationale attached.

3. Disapproved: reasons attached.

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| --- | --- | --- | --- | --- | --- |
| Division | Course Number / Title | % Overlap | Option | Division Dean of existing course (Signature required for all options) | Date |
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**Section 7. Qualification to fulfill degree requirements** (complete all relevant forms, available at <http://www.lanecc.edu/currsched/curriculum-forms> and send to Curriculum/Scheduling for the Degree Requirements Review Committee):

Form(s) applying for the following degree requirement status have been attached. (Only check this box when forms have been completed and attached.)

**AAOT, ASOT-Bus, OTM:**

Arts & Letters

Social Sciences

X Science /Computer Science

Mathematics

Cultural Literacy Option

(please submit with course syllabus to Michael Samano in Social Science)

**All degrees:**

Health/Wellness/Fitness

**AAS, 1-year and 2-year certificates:**

Human Relations

**Optional designation:**

Sustainability status

**Section 8. Library Impact Statement**

Under accreditation standards, Library consultation is essential for new programs, new courses and for substantively revised courses when the revisions entail any change in library use.

**What assignments will require the use of library and information resources?**

Students will do a project on an area of scientific controversy over the course of the term.

Each academic area has a Liaison Librarian <http://www.lanecc.edu/library/services/liaison.htm>. Contact the designated librarian to discuss the library needs of your course. Please allow the librarian at least one week to assess library resources.

**To be completed by Liaison Librarian:**

X Library resources are adequate to support this proposal.

Additional resources are needed but can be obtained from current funds.

Significant additional Library funds/resources are required to support this proposal.

Liaison Librarian Date

**Section 9. Divisional Approval** (To be completed by Division Chair and Administrative Assistant)

**Human, Physical, and Financial Resources:**

Additional instructional costs (staff, materials, services or facilities) will be incurred to offer this course. Source of funding:

No additional instructional resources (staff, materials, services or facilities) are needed to offer this course.  
Explain:

**Required Certifications:**

We have developed minimum course certification standards according to the COPPs procedure “Instructor Qualifications: Credit,” to be filed with ASA upon course approval.

We have completed faculty certification form(s) for faculty qualified to teach this course, to be filed with ASA and Human Resources upon course approval.

Administrative Assistant/Coordinator Date

**Fees:**

We have completed fee rationale and fee request forms to be submitted to ASA upon course approval, in compliance with the COPPs procedure, “Fees: Special”

No special fees will be required for this course.

**Divisional Recommendation:**

The Division Chair and Administrative Assistant have reviewed this course proposal and kept a copy for divisional files.

Faculty review of this course was completed within the division on      (date).

Pass  Do Not Pass

Academic Dean Date

**Section 10. College Approval**

     

Curriculum Committee Chair Date Executive Dean for Academic Affairs Date

Curriculum Approval Committee hearing:       \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Vice President for Academic & Date

Student Affairs