**Department of Kinesiology**

**Scientific Writing—Course Syllabus**

**1. Course Number:** HLHP 7950

**Course Title:** Scientific Writing

**Credit Hours:** 3 semester hours (Lecture 3)

**Prerequisites:** None

**Co-requisites:** None

**2. Term:** Spring 2010

**Day/Time:** TR 11 – 12:15 pm

**Instructor:** Michael Falvo, MS, CSCS

**Office Address:** COLSM 1082

**Contact Information:** MJFALVO@WUSTL.EDU

**Office Hours:** By appointment

**3. Texts or Major Resources:**

A. Ingersoll CD, *Research in Athletic Training*. Thorofare, NJ, Slack, Inc., 2001.

B. Day, R.A., and Gastel, B. *How to Write and Publish a Scientific Paper: 6th Ed*. Westport, CT: Greenwood Press (recommended).

C. Additional readings as assigned

**4. Course Description:** Methods of critical analysis of scientific writing and proper preparation of a scientific research proposal.

**5. Student Learning Outcomes:** Following completion of course, students understand the following:

a. Techniques to critically analyze scientific writing

 b. Evaluating the validity and quality of published research articles

 c. Methods of literature review

 d. Components and content of a scientific paper

 e. Successful completion of a research proposal and paper

**6. Course Content Outline:**

*Week* *Topic Due*

Wk 1 (12, 14 Jan) Intro to course/Identifying Funding

Wk 2 (19 Jan\*) Intro to Writing/Style and Structure Research Topic Due

Wk 3 (26, 28 Jan) Manuscript Components/Types/Lit Review **Funding Source**

Wk 4 (2, 4 Feb) Study Design/Abstract/Title

Wk 5 (9, 11 Feb) Introduction/Methods **Lit Review/References**

Wk 6 (16, 18 Feb) Results/Technology **Abstract/Title**

Wk 7 (23, 25 Feb) Discussion/Conclusion **Introduction**

Wk 8 (2, 4 Mar) NO CLASS **Methods**

Wk 9 (9, 11 Mar) IRB/HIPPA Grant Agency Due

Wk 10 (23, 25 Mar) Specific Aims/Grant Agencies **Expected Results**

Wk 11 (30 Mar, 1 Apr) Grant Writing **Figures/Tables**

Wk 12 (6, 8 Apr) Reviewing **Specific Aims**

Wk 13 (13, 15 Apr) Journal Submission Process **Discussion**

Wk 14 (20, 22 Apr) Presenting your research **Grant Application**

Wk 15 (27, 29 Apr) Student Presentations **Final Proposal**

\*No class on Jan 21st

**7. Assignments/Projects:** Students will develop a project that investigates a publishable question in an area specific to their work. For students in the Post-Certification Graduate Athletic Training Progran this project should have been previously identified in KINE 7950 and approved by Dr. JoEllen Sefton. New projects must be approved by the instructor as well as Dr. Sefton, and the research project agreement form signed and filed with Dr. Sefton. Students will complete all aspects of this proposal (lit review/references, abstract/title, intro, methods, expected results, figures/tables, and discussion). This proposal should conform to a specific peer-reviewed (Medline indexed) journal. Additionally, students will be required to convert this proposal into a grant application. The grant agency/application should be specific to the student’s research and must be approved by the instructor. A breakdown of all requirements is as follows:

a. *Proposal Components*: each component of the proposal (literature review, abstract/title, intro, methods, expected results, figures/tables, discussion) will be due as listed in section # 6 above. Students are required to bring to class extra paper copies for small group in-class critical analysis.

b. *Final Proposal*: based on feedback from classmates and instructor, students will revise each component and compile their final proposal to be turned in during the last week of class. Students should also include their original version (uncorrected) as well. All formatting should follow that required by the intended journal.

c. *Grant Components*: students are required to provide a short (5 – 10 min) class presentation on a potential grant funding agency applicable to their current or future work. The agency identified in presentation does not have to be the one chosen for the grant application. Students will also complete a ‘Specific Aims’ page based on their research question.

d. *Grant Application*: Students will prepare an entire grant application, following guidelines from the grant agency (i.e. NIH, NATA, ACSM, NSCA, etc.). The grant agency must be approved by the instructor.

e. *Final Presentation:* Students will be required to deliver a 10 – 15 min presentation on **either** their final proposal or grant application. The format should be powerpoint.

**8. Rubric and Grading Scale:**

*Item Final Letter Grade*

a. Proposal Components—100 pts total 89.9 – 100 = A

* Literature Review/References (20) 79.9 – 89.8 = B
* Abstract/Title (10) 69.9 – 79.8 = C
* Introduction (10) 59.9 – 69.8 = D
* Methods (15) >59.9 = F
* Expected Results (15)
* Figures/Tables (10)
* Discussion (20)

b. Final Proposal—30 pts

c. Funding Source Presentation—10 pts

d. Specific Aims—10 pts

e. Grant Application—30 pts

f. Final Presentation—20 pts

**9. Class Policy Statements:**

A. Attendance: Although attendance is not required, students are expected to attend all classes, and will be held responsible for any content covered in the event of an absence. 1. If an instructor chooses to require attendance, the attendance policy must be consistent with the university attendance policy outlined in the *Tiger Cub*. Instructors may not invoke grade penalties for appropriately documented excused absences.

B. Excused absences: Students are granted excused absences from class for the following reasons: illness of the student or serious illness of a member of the student’s immediate family, the death of a member of the student’s immediate family, trips for student organizations sponsored by an academic unit, trips for university classes, trips for participation in intercollegiate athletic events, subpoena for a court appearance, and religious holidays. Students who wish to have an excused absence from class for any other reason must contact the instructor in advance of the absence to request permission. The instructor will weigh the merits of the request and render a decision. When feasible, the student must notify the instructor prior to the occurrence of any excused absences, but in no case shall such notification occur more than one week after the absence. Appropriate documentation for all excused absences is required. Please see the *Tiger Cub* for more information on excused absences.

C. Make-Up Policy: Arrangement to make up a missed major assignment (e.g., those in bold in Section 6) due to properly authorized excused absences must be initiated by the student within one week of the end of the period of the excused absences(s). Except in unusual circumstances, such as the continued absence of the student or the advent of university holidays, a make-up must be completed in two weeks of the date that the student initiates arrangements for it. Except in extraordinary circumstance, no make-up dates will be arranged during the last three days before the final exam period begins.

D. Academic Honesty Policy: All portions of the Auburn University student academic honesty code (Title XII) found in the *Tiger Cub* will apply to university courses. All academic honesty violations or alleged violations of the SGA Code of Laws will be reported to the Office of the Provost, which will then refer the case to the Academic Honesty Committee.

E. Disability Accommodations: Students who need special accommodations in class, as provided by the Americans with Disabilities Act, should arrange for a confidential meeting with the instructor during office hours in the first week of classes (or as soon as possible if accommodations are needed immediately). The student must bring a copy of their Accommodations Letter and an Instructor Verification Form to the meeting. If the student does not have these forms, they should make an appointment with the Program for Students with Disabilities, 1288 Haley Center, 844-2096 (V/TT).

F. Professionalism: As faculty, staff, and students interact in professional settings, they are expected to demonstrate professional behaviors as defined in the College’s conceptual framework. These professional commitments or dispositions are listed below:

* Engage in responsible and ethical professional practices
* Contribute to collaborative learning communities
* Demonstrate a commitment to diversity
* Model and nurture intellectual vitality