

PROCESS A NON-GENERAL EDUCATION ~ CURRICULUM PROPOSAL

SCC #02-03- 115 ^(D)

Deadlines:

Regular proposals: October 18, 2002 to be implemented Fall 2003; Short-Term proposals: December 6, 2002 to be implemented Fall 2003
Regular proposals: February 14, 2003 to be implemented Spring 2004; March 21, 2003 short-term courses to be implemented Spring 2004

PROPOSAL TITLE: NURS 402 ENVIRONMENTAL & OCCUPATIONAL HEALTH

Sponsor(s): <u>P. MOSTO</u>	E-Mail: <u>MOSTO@ROWAN.EDU</u>	Ext: <u>4834</u>
<u>G. HECHT</u>	E-Mail: <u>HECHT@</u>	Ext: <u>3577</u>
<u>E. BROOKS</u>	E-Mail: <u>BROOKSE@</u>	Ext: <u>3589</u>
<u>R. MEAGHER</u>	E-Mail: <u>MEACHER@</u>	Ext: <u>3570</u>

DEPARTMENT: BIOLOGY

COLLEGE: CAS

If Liberal Arts & Sciences CHECK : History/Humanities Math/Sciences Social/Behavioral Sciences

UNDERGRADUATE GRADUATE

THE ATTACHED **NON-GEN-ED** PROPOSAL IS BEST DESCRIBED BY THE ITEM(S) CHECKED.

<input checked="" type="checkbox"/> New non-gen-ed course	<input type="checkbox"/> Non-gen-ed degree requirements
<input type="checkbox"/> Short-term non-gen-ed course	<input type="checkbox"/> Major
<input type="checkbox"/> Minor curricular changes (fewer than three)	<input type="checkbox"/> Minor, specialization, concentration, track, certificate program
<input type="checkbox"/> Existing non-gen-ed course	

The following signatures REPRESENT APPROVAL

Department Chair: [Signature] Date: 2/21/03

Department Curriculum Chair: [Signature] Date: 2/21/03

Academic Dean: [Signature] Date: 2-25-03

College Curriculum Chair: [Signature] Date: 2-22-03

College Curriculum Committee OPEN HEARING Date: 2-22-03 Approved Not Approved

UNIVERSITY CURRICULUM COMMITTEE

Senate Curriculum Chair Signature: [Signature] Date: Senate Announcement/Vote: 9-22-2003

Comments: See proposal SCC# 02-03-817

EXECUTIVE VICE PRESIDENT/PROVOST Signature: [Signature] Date: 2/17/04 ✓

Approved ~ Not Approved due to the following: Student Cr Hrs Faculty Load Hrs Equalized Cr Hrs

REGISTRAR

Date: 3/11/04 Course Description Received & Approved ~ Hegis Taxonomy & Course #: 1203402

Registrar Signature: _____
OFFICE OF THE PROVOST

NOTIFICATION FORWARD

MAR 15 2004

Academic Dean Department Chair Registrar Sponsor(s)

Jim 3/17/04

1 New Course Proposal:

2 **ENVIRONMENTAL AND OCCUPATIONAL HEALTH**

3
4 **I. DETAILS.**

5
6 **a. Course Title:** Environmental and Occupational Health

7
8 **b. Sponsors:** Gregory B. Hecht, Elizabeth Brooks, Richard Meagher (Dept.
9 Biological Sciences)

10 Co-sponsor: UMDNJ (University of Medicine & Dentistry of New Jersey)

11
12
13 **c. Credit Hours:** 4.0

14
15 **d. Course level:** Senior (400 level). This course has previously been designated
16 "NURS 402" at NJIT (see "Rationale" below); if possible, a HEGIS number
17 containing the "402" number is preferred.

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19 **e. Pre-requisites:**

20 NURS 301 [HEGIS number TBA]: Theory and Practice of Professional Nursing

21 NURS 303 [HEGIS number TBA]: Comprehensive Health Assessment

22 NURS 305 [HEGIS number TBA]: Pathophysiology

23 NURS 306 [HEGIS number TBA]: Pharmacology

24 NURS 304 [HEGIS number TBA]: Nursing Informatics

25 enrollment in the UMDNJ/Rowan Joint R.N. to B.S.N. Program (see
26 accompanying "Bachelor of Science in Nursing" proposal)

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28 **f. Suggested Time & Scale of Implementation:** Initial offering to begin Fall 2004.
29 Course will be offered once every year during the Fall semester. The course will
30 meet four hours each week.

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33 **II. CURRICULAR EFFECT**

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35 The proposed course will be a requirement for completion of the UMDNJ/Rowan R.N. to
36 B.S.N. Joint Program.

37

38 **Offerings:** This course will be taught by faculty from UMDNJ rather than Rowan
39 University's Biological Sciences faculty. Thus, implementation of this proposal is
40 not expected to require any existing courses to be dropped or to be offered less
41 frequently.

42

43 **Adequacy of the present staff, resources, space needs, etc.:** This course will be
44 taught by faculty from UMDNJ rather than Rowan University's Biological
45 Sciences faculty. Thus, implementation of this course will not place a demand on
46 the teaching load of Rowan University's Biological Sciences Department. The
47 new science building -- scheduled to open during Summer 2003 -- offers ample
48 classroom space for this course.

49

50 **Recommended Library Resources:** All students enrolled in the UMDNJ/Rowan
51 Joint R.N. to B.S.N. Program will have access via the web or in person to the
52 UMDNJ library. Students in the current UMDNJ/NJIT joint program almost
53 exclusively use the UMDNJ library resources for this course and seldom use the
54 NJIT library. Thus, it is expected that this course will similarly not create a
55 demand for library resources on the Rowan University campus.

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58 **III. RATIONALE**

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60 This Environmental and Occupational Health course (NURS 402) is being
61 transferred to Rowan University from an existing BSN curriculum offered at NJIT.

62 The ability to understand the link between the environment, various occupations
63 and public health is vital to the field of medicine.

64 This course offers instruction of the wide array of occupations and work
65 environments. These students will explore the interrelationships that exist between these
66 various workplaces and health risks. Students are also given insight into their role for
67 change in the workplace and planned care in these settings.

68 It is therefore important that all nursing students be required to take this course in
69 Environmental and Occupational Health prior to completion of their BSN degree.

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71 **IV. ESSENCE OF THE COURSE**

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73 **a. Objectives of the course in relation to student outcomes.** Upon completion of this
74 course, the student will be able to:

75

- 76 1. Describe the field of environmental and occupational health.
- 77 2. Identify common health changes related to acute and/or chronic environmental or
78 occupational exposures.
- 79 3. Identify the roles of the members of the multidisciplinary team involved in
80 environmental and occupational health.
- 81 4. Explore the role of the nurse in the recognition, evaluation and control strategies
82 of environmental and/or occupational exposures.
- 83 5. Examine the social, political and economic factors that are related to health care in
84 these specialties.
- 85 6. Explore the interrelationships between environmental and occupational health
86 issues and local, state and federal legislation.
- 87 7. Analyze the legal and ethical implications of environmental and occupational
88 health policies and regulations
- 89 8. Identify the role of the nurse as an advocate of change in response to those
90 emerging health patterns impacted by the environment.
- 91 9. Analyze communication and collaboration patterns among the multidisciplinary
92 team involved in environmental and/or occupational health.

93

94 **b. Topical Outline/Content.**

95

- 96 1. Introduction to the Course: Historical
97 Perspective of Environmental Health Historical Overview; Current Concerns
98 with Occupational Health Issues; The Contemporary Workplace; The Drive
99 for Greater Diversity; Recognizing Occupational Disease; Diagnosis of the
100 Symptomatic Workers; Screening for Occupational Disease; Occupational
101 Surveillance for Disease Control

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- 103 2. Epidemiology: Overview of Basic Principles
104 Measuring Exposure; Common Measure of Disease Frequency; Comparison
105 of Rates; Type of Epidemiologic Study Designs

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- 107 3. Government Agencies: Legislation and Regulations
108 OSHA, NIOSH, EPA, CDC, Worker's Compensation, Disability; Federal
109 Regulations; Standards Setting and Obligations of the Employers;

- 110 Enforcement Activities; The Adequacy of Worker's Compensation for
111 Occupational Injuries; Work Incapacity, Impairment, and Disability
112 Evaluation
113
- 114 4. Toxicology and Risk Management
115 Storage; Classes of Toxic Substances; Absorption; Distribution
116
- 117 5. Relation of Work and the Environment to Health, Family and Community
118 Occupational Safety
119 Safety Hazards in the Industrial Environment; Occupation Ergonomics;
120 Human Factors Engineering; Biomechanics
121
- 122 6. Hazards of the Environment
123 Industrial Hygiene, Hospital Setting; Identification, Evaluation, and Control
124 of Hazards; Toxic Materials; Measurement Techniques
125
- 126 7. Hazards of the Workplace: Chemical Carcinogens
127 Clinical and Epidemiologic Evidence; Testing and Evaluation of Carcinogens;
128 Regulation of Carcinogens in the Workplace; Clinical Encounters with
129 Carcinogens; Medical Monitoring
130
- 131 8. Hazards of the Workplace: Physical (Heat, Cold, Noise, Vibrations and
132 Radiation)
133 Sources and Levels of Radiation in the Environment; Types of Radiation
134 Injury; Effects, Damage and Prevention of Radiation Injury; Behavioral and
135 Audiological Manifestation of Noise-Induced Hearing Loss; Hearing
136 Conservation; Vibration; Atmospheric Variations; High Altitude
137 Environments
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- 139 9. Hazards of the Workplace: Biological
140 Infection Control; Infectious Disease in Health Care Workers; Infectious
141 Disease in Non-Health Care Workers; Influenza Control
142
- 143 10. Hazards of the Workplace: Psychological
144 Occupation Stress; Conceptualization of Stress; Components of the Stress
145 Process; Violence in the Workplace; Management of Stress
146
- 147 11. Multidisciplinary Occupational Health Team: Roles and Relationships

148 Occupational Health and Safety Programs in the Workplace; Selective Job
149 Placement; Ensuring a Safe and Healthful Work Environment; Treatment and
150 Rehabilitation of Occupational Illnesses; Health Maintenance and Health
151 Promotion Programs; Occupation Health and Safety Team; Screening for
152 Occupational Disease; Screening Approaches; Possibilities for Improved
153 Screening; Client Education Program

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155 Methods of instruction for this course when it was offered at NJIT have included lectures,
156 seminars, handout materials, audio-visual materials, library research, written and oral
157 presentations, and field trips.

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159 *Examples of texts suitable for this course:*

160

161 American Psychological Association (2001). Publication Manual of the American
162 Psychological Association (5th Ed.). Washington, D.C. Author.

163

164 Levy, B.M. and Wegman, D. H. (eds.) (1995). Occupational Health: Recognizing
165 and Preventing Work-Related Disease. Boston: Little Brown and Co.

166

167 Rogers, b. (1994). Occupational Health Nursing: Concepts and Practices.
168 Philadelphia: W. B. Saunders.

169

170 Rom, W. (Ed.) (1992). Environmental and Occupational Medicine. Boston: Little
171 Brown and Co.

172

173 LaDow, J. (1997). Occupational and Environmental Medicine. Stamford: Appleton
174 and Lange.

175

176 **c. Evaluation of students and grading procedure.** During the time that this course was
177 taught at NJIT, students were evaluated by the following kinds of activities: take-
178 home exams; field analysis term paper; in-class group presentations; research article
179 critiques (written and oral presentations); and class participation.

180

181 **d. Course Evaluation:** During the time that this course was taught at NJIT, the UMDNJ
182 faculty routinely conducted assessment of the success of this course. The Biological
183 Sciences Department routinely reviews each of its course offerings to assess their success
184 in meeting stated goals and objectives. The Biological Sciences Department, in
185 collaboration with UMDNJ, will expand its review process to include this course.

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188 **V. RESULTS OF CONSULTATIONS**

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190 Results of Consultations

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192 Planned consultations:

193 Dept. Special Education

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196 **CATALOG DESCRIPTION**

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198

199 **XxxxHEGISxxxx****4.0 s.h.**200 *(Pre-requisites: NURS 301: Theory and Practice of Professional Nursing; NURS 303:*201 *Comprehensive Health Assessment; NURS 305: Pathophysiology; NURS306:*202 *Pharmacology; NURS 304: Nursing Informatics; [HEGIS numbers for all of these*203 *courses TBA]; enrollment in the UMDNJ/Rowan Joint R.N. to B.S.N. Program)*

204 The relationships that exist between the environment, the workplace and health are the
205 focus of this course. Key concepts, principles and strategies related to environmental and
206 occupational health nursing are explored. Teaching-learning strategies focus on critical
207 thinking skills related to these areas of health care. Knowledge obtained from this course
208 will prepare students to assess changes in health status that may be related to the
209 environment or the workplace. Students are provided with skills needed to recognize,
210 evaluate, and to recommend control strategies for these phenomena.

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