

PROCESS A NON-GENERAL EDUCATION ~ CURRICULUM PROPOSAL

SCC #02-03- J-21 [©]

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 304 NURSING INFORMATICS

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. MEACHER</u>	E-Mail: <u>MEACHER@</u>	Ext: <u>3570</u>

DEPARTMENT: BIOLOGY

COLLEGE: LAS

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	

RECEIVED BY
FEB 15 2003
HELP

The following signatures REPRESENT APPROVAL

Department Chair: <u>[Signature]</u>	Date: <u>2/21/03</u>
Department Curriculum Chair: <u>[Signature]</u>	Date: <u>2/21/03</u>
Academic Dean: <u>[Signature]</u>	Date: <u>2-25-03</u>
College Curriculum Chair: <u>[Signature]</u>	Date: <u>2-22-03</u>

College Curriculum Committee OPEN HEARING Date: 4-22-03 Approved Not Approved

UNIVERSITY CURRICULUM COMMITTEE

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

Comments: 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

Date: 3/11/04 REGISTRAR Course Description Received & Approved ~ Hegis Taxonomy & Course #: 1203304

OFFICE OF THE REGISTRAR
MAR 15 2004
ROWAN UNIVERSITY

[Signature]
NOTIFICATION FORWARD

Academic Dean Department Chair Registrar Sponsor(s)

Jim 3/17/04

1 New Course Proposal:
2 **NURSING INFORMATICS**

3
4 **I. DETAILS.**

5
6 **a. Course Title:** Nursing Informatics

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

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

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

14
15 **d. Course level:** Junior (300 level). This course has previously been designated "NURS
16 304" at NJIT (see "Rationale" below); if possible, a HEGIS number containing the "?"
17 number is preferred.

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19 **e. Pre-requisites:** enrollment in the UMDNJ/Rowan Joint R.N. to B.S.N. Program (see
20 accompanying "Bachelor of Science in Nursing" proposal)

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22 **f. Suggested Time & Scale of Implementation:** Initial offering to begin Summer 2004.
23 Course will be offered once every year during the summer. The course will be delivered
24 over a 12 week period via WebCT.

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27 **II. CURRICULAR EFFECT**

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

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

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36 **Adequacy of the present staff, resources, space needs, etc.:** This course will be taught by
37 faculty from UMDNJ rather than Rowan University's Biological Sciences faculty. Thus,
38 implementation of this course will not place a demand on the teaching load of Rowan

**SIGN
HERE**



39 University's Biological Sciences Department. The new science building -- scheduled to
40 open during Summer 2003 -- offers ample classroom space for this course.

41

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

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50 **III. RATIONALE**

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52 This Nursing Informatics course (NURS 304) is being transferred to Rowan University
53 from an existing BSN curriculum offered at NJIT.

54 The study of informatics is important to the field of medicine. The ability to understand,
55 collect, categorized and distribute data is central to the registered nurse, especially in the hospital
56 setting.

57 This course offers instruction of the many aspects of information science. Students are
58 instructed how to best use data to facilitate patient learning, planned change of treatment and
59 research. The nurse is also taught to recognize the legal and ethical considerations of data
60 analysis and application.

61 It is therefore important that all nursing students be required to take this course in
62 Nursing Informatics prior to completion of their BSN degree.

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65 **IV. ESSENCE OF THE COURSE**

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

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- 70 1. Apply the knowledge, principles, and concepts from the basic sciences, the arts,
71 humanities and nursing science to nursing informatics.
- 72 2. Utilizing the Science of Unitary Man, apply nursing informatics to clinical practice.
- 73 3. Employ nursing informatics to facilitate teaching-learning strategies.
- 74 4. Apply nursing informatics to facilitate planned change.
- 75 5. Apply nursing information systems to facilitate research.
- 76 6. Recognize legal and ethical implications of nursing information systems.
- 77 7. Identify the professional nursing role in nursing informatics.

78 8. Describe the integration of nursing informatics into the multi disciplinary health care
79 system.

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81 **b. Topical Outline/Content.**

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83 1. WEBCT Orientation; Computer Competency Assessment Survey

84 2. Nursing Informatics; Role of Nursing Informatics Specialist; Scope and Standard of
85 Practice of Nursing Informatics; Educational Preparation / Certification Informatics
86 Organization

87 3. Historical Perspectives of Computers; Benefits and Characteristics of computers;
88 Computer Myths and Computer Anxiety

89 4. Hardware: The Machine Computer; Software: What Makes the Computer Work

90 5. Legal and Ethical Issues; Confidentiality and Security issues; HIPAA

91 6. Systems Developmental Lifecycle; Types, Benefits, System implementation,

92 7. Word Processors: Create, copy, save, retrieve and save documents.

93 8. Excel/Spreadsheets: Create forms, charts, graphs and perform calculations;

94 Access/Databases: Create tables, query, reports for decision making

95 9. Power Point Presentation: create and design slide/webpage presentation, graphics

96 10. Web page development; Creating a Webpage; Choosing background and theme;
97 Hyperlinking your Webpage; Publishing your Webpage

98 11. Internet: World Wide Web, browsers, URLs, Search engines, Internet searches,

99 Bibliographic databases; Internet implications and issues; Electronic mail: Open, create
100 and send messages and attachment

101 12. Computers applications in nursing administration; Nursing Classification Systems

102 13. Nursing Documentation Systems

103 14. Computer applications in nursing practice/patient care

104 15. Computers in nursing education; Patient /Community health education; Computers
105 applications in research/ CQI / TQM

106 16. Computer Skills Survey Reassessment

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108 Methods of instruction: This course will be presented via web-based based media (as it was
109 when offered at NJIT). The content of this course will be conveyed through selected materials,

110 interactive forum discussion, assisted and individual hands on computer practice, web based-
111 instructions programs, student projects and presentations.

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113 *Examples of texts suitable for this course:*

114

115 American Psychological Association . (2001). *Manual of the american psychological*
116 *association*. (5th ed.). Washington, D.C.

117

118 Thede, Linda(1999). *Computers in nursing: bridges to the future*. J.B. Lippincott:
119 Philadelphia, PA.

120

121 Nicoll, L. (1998). *Computers in nursing: nurses' guide to the internet*. Philadelphia, PA:
122 J.B. Lippincott.

123

124 American Nurses Association. (2001). *Scope and standards of nursing informatics*.
125 Washington, D. C.: American Nurses Publishing.

126

127 Marriner, Ann. (1994). *Nursing theorist and their work*. CV Mosby: St. Louis, MO.

128

129 McCue, Camille (February 1999). *Microsoft Office 2000 9 in 1 for dummies desk reference:*
130 *9 books in 1: Windows 98, word, excel, Access, outlook, powerpoint, frontpage,*
131 *Publisher, PhotoDraw, Idg Publishing Books Worldwide: New York.*

132

133 Sigma Theta Tau (Publisher) (1996). *Nurses and their computers: clinical innovators.*
134 *Reflections, 22(2).*

135

136 *Examples of online databases relevant to this course:*

137 UMDNJ Library <http://www.umdj.edu/delibweb/>

138 CINAHL <http://www.cinahl.com/>

139 MEDLINE/MEDSCAPE <http://intapp.medscape.com/px/medlineapp/medline?cid=med>

140

141 *Examples of Internet sites relevant to this course:*

142

143 American Nursing Informatics Association <http://www.ania.org/>

144

145 APA Citation Style

'46 <http://www.liunet.edu/cwis/cwp/library/workshop/citapa.htm>

147

148 Free on Line Dictionary <http://foldoc.doc.ic.ac.uk/foldoc/index.html>

- 149
150 Lippincott's Nursing Center <http://www.nursingcenter.com/>
151
152 National Library of Medicine <http://www.nlm.nih.gov>
153
154 Nursing City <http://www.nursing-city.com>
155
156 NursingNet <http://www.nursingnet.org/>
157
158 Nursing World <http://nursingworld.org>
159
160 Sigma Theta Tau International <http://www.nursingsociety.org/>
161
162 Virginia Henderson International <http://stti-web.iupui.edu/library>
163
164 WEB CT Access: <http://www.umdj.edu.webct>
165
166 Thede, (2000)Why Computers?
167 <http://junior.apk.net/~lqthede/Book/c01Comp/whycomp.html>
168
169 Orr, L. (?). Computer Anxiety <http://www.usm.maine.edu/~com/lindap~1.htm>
170
171 ANA Position Statement on Classification for Nursing Practice (1997)
172 <http://www.nursingworld.org/readroom/position/uap/uapclass.htm>
173
174 *Examples of additional readings suitable for this course:*
175
176 Adams, Caroline; DeFрати, Debra and Wilson, Marilynne. (1998). Data-driven quality
177 improvement for HMO patients: One agency's experience with OASIS and DBQL..
178 *JONA*, (28)10. pp20-25.
179
180 Anderson, R. (1992). Theory based approach to computer skill development in nursing
181 administration. *Computers in Nursing*,10(4): 152 - 156.
182
183 Averill, C.; Marek, K.; Zielstorff, R.; Kneedler, J.; Delaney, C. & Miholland, P. (1998).
184 ANA standards form nursing data sets in information systems. *Computers in Nursing*,
'85 16(3), 157 - 161.
186
187 Baxter, Bob (1997). Nursing the net. *Nursing* 97,30 - 31.

- 188
189 Brennan, P. (1992). Computer use and nursing research. *Western Journal of Nursing*
190 *Research*, 14(2): 239 - 240.
191
- 192 Brennan, Patricia; Anthony; Mary; Jones, Josetti, Kahana, E. (1998). Nursing practice
193 models: Implication for information system design. *TONA*, 28(10) p26-31.
194
- 195 Butler, Margaret; Binder, Douglas. (1999). Intensive care unit bedside documentation
196 systems. *Computers in Nursing*,
197 17(1), 32 - 40.
198
- 199 Canavan, Kathleen. (1996). New Technologies propel nursing profession forward. *The*
200 *American Nurse*,
201 28(8): 1 - 2.
202
- 203 Canavan, Kathleen. (1996). Telehealth: Nursing grapples with increasing care access
204 without endangering quality. *The*
205 *American Nurse*, 28(2): 1 - 2.
206
- 207 Chaffee, Mary. (1999). The telehealth odyssey. *AJN*, 99(7), 27 - 32.
208
- 209 Coenen, Amy, McNeil, Barbara, Bakken, Suzanne, Bickford, Carol, Warren, Judith (2001).
210 Toward comparable nursing data: American nurses association criteria for data sets,
211 classification systems, and nomenclatures, *Computers in Nursing*, 19 (6). Retrieved on
212 July 14, 2002 from http://nursingcenter.com/prodev/ce_article.asp?tid=53080
213
- 214 Chu, Steven. (1993). Clinical Information systems: the nursing interface. *Nursing*
215 *Management*, 24(4): 62 - 66
216
- 217 Croft, A. (1993). A psychiatric patient classification system that really works! *Nursing*
218 *Management*, 24(11): 66 - 71
219
- 220 DiJerome, L. (1992). The nursing case management computerized system: meeting the
221 challenge of health care delivery through technology. *Computers in Nursing*, 10(6), 250 -
222 258.
223
- 224 Dillon, T.; McDowell, D.; Salimian, F.; Conklin, P. (1998). Perceived ease of use and
225 usefulness of bedside - computer systems. *Computers in Nursing*, 16(3), 151 - 156.
226

- 227 Farabough, N. (1990). Maintaining student interest in CAI. *Computers in Nursing*, 8(6),
228 249 - 252.
229
- 230 Ferguson, Tom. (1997). Health Care in Cyberspace: Patients Lead a Revolution. *The*
231 *Futurist*, 29 - 33.
232
- 233 Goodman, J. And Blake, J. (1996). Multimedia courseware: transforming the
234 classroom. *Computers in Nursing*, 14(5), 287 - 296.
235
- 236 Gordon, M. (1998). Nursing nomenclature and classification system development. *On Line*
237 *Journal of Issues in Nursing*, Retrieved 7/14, 2002) from
238 http://www.nursingworld.org/ojin/tpc7/tpc7_1.htm
239
- 240 Gostin, L. Et. Al. (1993). Privacy and security of personal information in a new health care
241 system. *JAMA*, 270(20): 2487 - 2493.
242
- 243 Hammond, W.; Hales, J.; Lobach, D. & Straube, M. (1997). Integration of a computer -
244 based patient record system into the primary care setting. *Computers in Nursing*, 5(2),
245 561 - 568 Supplement.
246
- 247 Jasyasuriya, R. And Caputi, P. (1996) Computer Attitude and Computer Anxiety in
248 Nursing. *Computers in Nursing*, 14(6): 340 - 345.
249
- 250 Joint Commission on Accreditation of Healthcare Organizations. (1996). *1996*
251 *Comprehensive Accreditation Manual for Hospitals* (pp.405-448) . Oakbrook Terrace,
252 IL: JCAHO.
253
- 254 Jones, Lynette. (1997). Building the Information Infrastructure Required for Managed
255 Care. *Image*, 29(4), 377 - 382.
256
- 257 Koch, E. (1990). Nursing students preference in the use of computer assisted learning.
258 *JONE*. 29(3) 122 - 126.
259
- 260 Larrabee et al (2001). Evaluation of documentation before and after implementation of a
261 nursing information system in an acute care hospital. *Computers in Nursing*, 19(2).
262 Retrieved on February 6, 2003 from
263 http://www.nursingcenter.com/prodev/ce_article.asp?tid=53447
264
- 265 Leske, J (1992). Use of the minimum data set. *Computers in Nursing*, 10(6), 259 - 263.

- 266
267 Masten, Y. (1990). Automated continuing education and patient education, *Computers in*
268 *Nursing*.
269
- 270 McGreeney, C. et al. (1997). The Joint Commission on Accreditation of Healthcare
271 Organization: Indicator measurement system, *Computers in Nursing*,15(2) 587 - 595.
272
- 273 Miholland, K. (1992). Computer-based patient record: from pipe dream to reality.
274 *Computers in Nursing*, 10(5): 191 - 192.
275
- 276 Nadle, G. (1993). The challenge of a paperless system. *JONA* ,23(4):37 - 38.
277
- 278 Reis, J. (1992). Computers and undergraduate nursing research: a pilot study. *JONE*, 31(5):
279 237 - 238.
280
- 281 Sardinas, J. & Muldoon, J. (1998). Securing the Transmission and Storage of Medical
282 Information. *Computers in Nursing*, 16(3), 162 - 170.
283
- 284 Sparks, S. (1999). Electronic Publishing and Nursing research. *Nursing Research*, 48(1)
285 p50 - 54.
286
- 287 Sparks, S. (1997) Using the internet for nursing administration. *Journal of Nursing*
288 *Administration*, 27(3) 15 - 20.
289
- 290 Smith, R. (1993). Computer assisted functional assessment and documentation. *AJOT*,
291 47(11) 988 - 992.
292
- 293 Song, L.; Ho, J. & Ho, S. (1997) The integrated patient information system. *Computers in*
294 *Nursing*, 15(2). 514 - 522.
295
- 296 Stafford, Cynthia J. and Anderson, Linda K. (2002). The “Big Bang” Implementation: Not
297 for the Faint of Heart. *Computers in Nursing*, 20, (1). Retrieved on July 14, 2002 from
298 http://www.nursingcenter.com/prodev/ce_article.asp?tid=269480
299
- 300 Trofino, J. (1993). Voice-activated nursing documentation: on the cutting edge. *Nursing*
301 *Management*, 24(7): 40 - 42.
302
- 303 White, S. (1993). Computer system helps define health status of ICU patients. *Critical*
304 *Care Management*, 1(2), 30 - 31.

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McGinty, B. And Ghiz, J. (1993). Developing a nursing managed central transport service. *Nursing Management*, 24(11): 62 - 65.

Park, H. (1996). Shedding light on patients- needs. *Reflections*, 22(2): 12 - 13.

Schulmerich, S. (1992). Developing an integrated financial system. *JONA*, 22(6): 21 - 23.

Silve, N. (1992). Monitoring nursing productivity: a unique approach integrating on-line kardex with workload management. *Computers in Nursing*, 10(6): 232 - 234.

Snyder-Halpern, Rita (2001). Developing Clinical Practice Environments Supporting the Knowledge Work of Nurses. *Computers in Nursing*, 19 (1). Retrieved on July 14, 2002 from http://nursingcenter.com/prodev/ce_article.asp?tid=53417

Tracy, D. And Jacobson, J. (1996). A database to select and inventory services, measure value, and assist redesign. *Journal of Healthcare Quality*, 18(5): 12 - 20.

Walsh, M. And Cortez, F. (1991). QA systems must balance functionality with data security. *Computers in Nursing*, 9(1): 27 - 31.

VanLeeuwan, D. And Marks, L. (1996). Using the internet for professional development. *Journal of Health Care Quality*, 18(3): 22 - 23.

Vargo, G. (1991). Computerized assisted patient education in the ambulatory care setting. *Computers in Nursing*, 9(5): 168 - 169.

c. Evaluation of students and grading procedure. During the time that this course was taught at NJIT, students were evaluated by the following kinds of activities: weekly assignments and discussion (feedback & participation); Nursing Informatics project (plus presentation to the class); Information Systems Nursing term paper.

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

344 **V. RESULTS OF CONSULTATIONS**

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346 Results of Consultations

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348 Planned consultations:

349 Dept. Special Education

350 Should we consult with Dept. Computer Science for this course?

351

352 **CATALOG DESCRIPTION**

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355 **XxxxHEGISxxxx 4.0 s.h.**

356 *(Pre-requisites: enrollment in the UMDNJ/Rowan Joint R.N. to B.S.N. Program)*

357 Nursing informatics is defined as computer applications for nursing care delivery. Students will
358 be exposed to both PC-based mainframe, and Internet computer system applications through
359 computer laboratory and field experiences.

360