Distance Education
Course Development Form

Use this form to propose a course that has not yet been offered via your chosen distance education modality at Suffolk.

This form has been created to ensure that the process has been adhered to in proposing a distance education (DE) course at Suffolk. Here’s how the process works:

- **To propose a course** that has never been offered via DE at Suffolk...
  - complete this DE Course Development Form.
  - All new DE courses require approval in a specific DE modality (online, hybrid, DL classroom, or telecourse) by your department/area.

- **Due dates for 2009 academic year**
  - for spring courses ⇒ by second Monday in April – April 14, 2008
  - for summer courses ⇒ by second Monday in September – September 08, 2008
  - for fall courses ⇒ by second Monday in November – November 10, 2008

*Faculty proposing a DE course must have taught that course in a traditional classroom environment prior to teaching it in a DE format.*

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<table>
<thead>
<tr>
<th>1. Faculty Information</th>
<th>Helen Wist/Kathy Burger</th>
<th>4/1/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Name</td>
<td></td>
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<tr>
<td>Employment Status</td>
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<tr>
<td>Faculty Campus</td>
<td>Ammerman</td>
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<td>Eastern</td>
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<td>Grant</td>
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<td>Full-time</td>
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<td></td>
<td>Adjunct</td>
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<thead>
<tr>
<th>2. Proposed Course Information</th>
<th>NR 19 Dosage Calculation for Nurses</th>
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<tbody>
<tr>
<td>Course Name and Number</td>
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<tr>
<td>Nursing</td>
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<tr>
<td>Academic Department or Area</td>
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<td>DE Modality</td>
<td>online</td>
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<td></td>
<td>hybrid</td>
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<td></td>
<td>DL classroom</td>
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<tr>
<td></td>
<td>telecourse</td>
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<tr>
<td>Proposed CMS</td>
<td>Blackboard</td>
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<td></td>
<td>SLN</td>
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<td>other:</td>
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<td>Current CMS in use at time of implementation</td>
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Note to Faculty: Please keep a copy for your records and submit a copy of the first page to the Office of Instructional Technology at the time of submission to the Chair.
Rationale

1. Rationale  
   Briefly explain your rationale for proposing this course in your chosen DE modality. Consider integrating answers to the following questions in your response:

   - Why are you proposing this course as a DE course?
   - What makes this particular course well suited for this specific DE modality? That is, what are some of the unique characteristics and requirements of this DE modality and how that differs—pedagogically, philosophically, strategically and organizationally—from the traditional, on-campus environment?
   - What methods are you considering for how the technology might be employed?
   - What communication strategies might you use, e.g., email, threaded discussion, chat, integration of web resources, electronic instructional resources?

   The Distance Education Committee in the School of Nursing has selected NR19, Dosage Calculation for Nurses, for development as an online course to progress towards its goal of integrating distance education modalities into the nursing curriculum when it best serves the goals and interests of both the students and the program.

   *NR19 – Dosage Calculation for Nurses* is designed to improve a student nurse’s ability in computations and measurements essential for safe administration of medications. It is currently offered in traditional classroom format as a 2 credit elective. Sections of this course have been successfully running on the Ammerman campus, but efforts to initiate sections on the Grant campus have been met by low enrollment. Informal polls of students reveal high interest in the course, however many students are unwillingly, or unable, to commit to further “on-campus” time.

   The offering of NR19 in online format as an additional option would benefit many students who would otherwise not enroll for the traditional classroom format.

   The course would be a faculty-guided self-paced tutorial that included learning activities, threaded discussions, and individualized instruction. Students and faculty would communicate via e-mail and online chat. Electronic web resources would be integrated into this format.

   Safe medication administration practices are of key concern in today’s healthcare environment. The additional offering of NR19 as a distance education course will provide more opportunities for developing student competencies in dosage calculation and medication administration safety.
Approval & Notification Signatures

1. Department or Area Approval

Each department/area determines which courses are to be offered in a DE format, initiates the approval process for new DE courses, and determines how many can be offered each semester. All course development proposals must be put to a vote in your entire department/area. Indicate the total department votes for, against, and abstaining from your proposal.

<table>
<thead>
<tr>
<th>Date of Department or Area Vote</th>
<th>Vote Results</th>
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<tbody>
<tr>
<td></td>
<td>total # of votes for</td>
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<tr>
<td></td>
<td>total # of votes against</td>
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<tr>
<td></td>
<td>total # of votes abstaining</td>
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2. Intra-Campus Department/ Discipline Notification

Once your department has voted to approve or disapprove this course, your department chair/area supervisor should notify the chairs on the other two campuses. Attach a copy of the email or memo to the other chairs indicating that they’ve been notified.

All DE course proposals must receive the signature of your area or department chair. He or she should sign on the line below.

Campus Department Chair/Supervisor

☐ Email/Memo Notification Attached

3. Campus Technology Administrator and Campus Dean

All DE course proposals must receive the signature of your campus technology administrator as well as your campus dean.

Campus Technology Administrator

Campus Dean
Technology Training and Certification

1. Faculty Development

The first time a faculty member is selected to teach a synchronous or asynchronous DE course, he or she shall receive three (3) credit hours of either release time or overload compensation the semester prior to the DE assignment for the purposes of training and/or course modification. Indicate your preference for overload pay or released time.

* Development compensation does *not* apply to telecourses.

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<tr>
<th>Faculty Preference</th>
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<tbody>
<tr>
<td>□ overload</td>
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<tr>
<td>□ release time</td>
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2. Certification

All DE faculty must have training in and be certified for the specific modality for which they are proposing to develop a course.

_CMS Platform_

_Date of Training Completion_

_Signature of Instructional Technology Dean_  
_Date_

3. Assignment to DE Faculty Peer Mentor

All DE faculty teaching online and hybrid courses will be assigned to a faculty mentor.

* Assignment to a peer mentor does *not* apply to DL classroom courses or telecourses.

_Name of DE Faculty Mentor_

_Date Mentor Notified_
Proposal for NR 23 Heath Assessment as an Online Course

Proposal
Distance Education Course
NR19

NR19 – Dosage Calculation for Nurses is designed to improve a student nurse’s ability in computations and measurements essential for safe administration of medications. It is currently offered in traditional classroom format as a 2 credit elective. Sections of this course have been successfully running on the Ammerman campus, but efforts to initiate sections on the Grant campus have been met by low enrollment. Informal polls of students reveal high interest in the course, however many students are unwillingly, or unable, to commit to further “on-campus” time.

The offering of NR19 in online format as an additional option would benefit many students who would otherwise not enroll for the traditional classroom format.

The course would be a faculty-guided self-paced tutorial that included learning activities, threaded discussions, and individualized instruction. Students and faculty would communicate via e-mail and online chat. Electronic web resources would be integrated into this format.

Safe medication administration practices are of key concern in today’s healthcare environment. The additional offering of NR19 as a distance education course will provide more opportunities for developing student competencies in dosage calculation and medication administration safety.

Respectfully Submitted,

Helen Wist, Professor of Nursing, Ammerman Campus
Kathy Burger, Assistant Professor of Nursing, Grant Campus
NR 19 Course Information

Course Name: Dosage Calculation for Nurses

Sponsoring Institution & Department: Suffolk County Community College, School of Nursing

Course Number: NR 19

Number of Credits: 2

Will Students have an option for additional credits? No

What are the course prerequisites? Acceptance into the nursing program

Is this course generally part of a degree program? No, elective course of study
What Program? Area of Study: N/A

What students might be interested in this course?
Students interested in the course are those who are enrolled in the nursing program and are seeking to enhance their dosage calculation skills.

Have you taught this topic before? In what formats have you taught this course?
Yes, this course has been taught as a lecture-based course.

What features does this course have?
The course would be a faculty-guided self-paced tutorial that included learning activities, threaded discussions, and individualized instruction. Students and faculty would communicate via e-mail and online chat. Electronic web resources would be integrated into this format.

About the Materials

What texts will you use?
Required texts purchased for Dosage Calculation for Nurses and the user access for online resources. A complete list of texts as of 3/08 is as follows:

Required Textbooks

What other readings/print materials? None

Will students need any additional software? No

What video or other media will students use? Weblinked electronic media

External Resources

During the term, will the course have:
None of the criteria listed (guest experts, additional instructors, auditors, outside participants)

In development, will the course have:
None of the criteria listed (guest experts, additional instructors, auditors, outside participants)
NR 19 Course Profile

Course Name: Dosage Calculation for Nurses

Developer’s Name: Helen Wist & Kathy Burger

Objectives: Upon successful completion of this course, the student should expect to have accomplished the following:

Course Objectives: Upon completion of this course the student will be able to:

1. Solve problems requiring the addition, subtraction, multiplication and division of fractions.
2. Compute problems involving the addition, subtraction, multiplication and division of decimals.
3. Solve math problems requiring the use of ratio and proportion.
4. Identify the units of length, volume and weight in the metric system.
5. Describe the metric abbreviations for gram, meter, liter, kilogram, centimeter, milligram and microgram.
6. Interpret and express apothecaries and household notations.
7. Calculate dosage problems requiring conversion from one unit to another within the same system of measurement.
8. Demonstrate ability to do conversions using ratio and proportion.
9. Determine the correct amount of medication in a syringe and in a medicine cup.
10. Explain the dosage of a drug to be given to a patient based on a physician’s order.
11. Identify standard medical abbreviations.
12. Identify and describe the different parts of a drug label.
13. Explain the dosage of a medication to be given to a patient based on a physician’s order and the drug label.
15. Calculate the correct dosage of a medication to administer to a patient, based on the physician’s order, after following the directions on the drug label for reconstituting the drug.
16. Measure insulin in an insulin syringe.
17. Calculate IV flow rates based on physician orders.
18. Describe the method of recalculating an IV that is not infusing on schedule.
19. Calculate hourly heparin dosages.
20. Calculate flow rates and assess safe dosages for critical care IV medications to be administered over a specified time period, such as mg/minute.
21. Calculate the flow rate for IVPB solutions.
22. Determine the recommended safe pediatric dose per kilogram of body weight from a reputable drug source.
23. Compute the amount of drug to be administered per kg of body weight.
24. Function safely in the administration of medications to patients.

Narrative Description:
This course covers computations and measurements essential for the safe administration of medications by nurses. It begins with a basic math review and includes measurements, ratios,
solutions and dosages for adults and children and concludes with advanced IV calculations. This is not a required course for nursing majors but is recommended for all.

The online course version will integrate independent and group learning activities and utilize web-based resources to enhance skills performance and application in dosage calculation.

**Course Modules:**
This course will be presented in 11 modules and will incorporate the course objectives listed above.

**Module 1**
- Diagnostic Pre-test
- Fractions and Decimals

**Module 2**
- Ratios, Percents, Ratio and Proportion

**Module 3**
- Systems of Measurement

**Module 4**
- Conversions
- Conversions of Time and Temperature
- Equipment for Dosages

**Module 5**
- Interpreting Drug Orders
- Understanding Drug Labels

**Module 6**
- Preventing Medication Errors
- Oral Dosages of Drugs

**Module 7**
- Parenteral Dosages of Drugs

**Module 8**
- Reconstitution

**Module 9**
- Intravenous Calculations

**Module 10**
- Pediatric and Adult Dosages Based on Body Weight
- Advanced Pediatric Calculations
Module 11
Advanced Adult IV Calculations

Learning Activities:
Students will be involved in several different types of learning activities as you progress through the course including include self-paced learning activities, collaborative work and web-based resources. Emphasis will be placed on synthesizing relevant information about dosage calculation strategies and application to clinical situations.

Self-paced learning will be guided by faculty-developed instructions and integrate electronic resources, interactive exercises and practice tests to master content. Students would work collaboratively online using threaded discussion. Students will use discussion boards and electronic mail to seek guidance and clarification of material.

Students will be required to complete four quizzes and two examinations following the completion of correlated material.

Methods of Evaluation:

1. Four quizzes 40%
2. Midterm examination 25%
3. Final examination 35%
4. Participation in electronic discussion Pass/Fail