Informatics Undergraduate Program

Esfandiar Haghverdi

Director of Informatics Undergraduate Studies

April 16, 2010
Outline

- Informatics Undergraduate Program (UGP) Committee
- Informatics BSc Program
- New General Education Requirements
- Revisions Recommended by Informatics UGP Committee
- Motions
- Discussion
UGP Committee Members

- Memo Dalkilic (Associate Professor, Division C)
- Esfandiar Haghverdi (Director, Assoc. Professor, Division C)
- Matt Hottell (Senior Lecturer, Division U)
- Kalpana Shankar (Assistant Professor, Division A)
- Jim Sizemore (Student Advisor)
- Jenny Williams (Student Advisor)
UGP Committee Members

- Memo Dalkilic (Associate Professor, Division C)
- Esfandiar Haghverdi (Director, Assoc. Professor, Division C)
- Matt Hottell (Senior Lecturer, Division U)
- Kalpana Shankar (Assistant Professor, Division A)
- Jim Sizemore (Student Advisor)
- Jenny Williams (Student Advisor)

- Richelle Brown (Director of Student Support and Recruiting)
- Sally Deckard (Director of Academic Operations)
- Dennis Groth (Associate Dean for Undergraduate Studies, Associate Professor)
- Michelle Knight (Undergraduate Recorder)
Informatics Core Requirements (35 credits)

1. Informatics core courses (26 credits)
2. 2 Advanced Informatics courses (6 credits)
3. 1 Informatics elective (3 credits)
Informatics BSc Program

- Informatics Core Requirements (35 credits)
  1. Informatics core courses (26 credits)
  2. 2 Advanced Informatics courses (6 credits)
  3. 1 Informatics elective (3 credits)

- Capstone (6 credits)
Informatics BSc Program

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- Cognate area (15-18 credits)
Informatics BSc Program

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- Capstone (6 credits)

- Cognate area (15-18 credits)

- General Education Requirements (38-41 credits)
  1. English Composition (3 credits)
  2. Writing (3 credits)
  3. Oral Communication (3 credits)
  4. Quantitative and Analytical Skills (6 credits)
  5. Natural Sciences (8 credits)
  6. Arts, Humanities and Social Sciences (5 courses, 15 credits, 1 in Ethics)
Informatics BSc Program

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  5. Natural Sciences (8 credits)
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- General Electives (22-28 credits)
New General Education Requirements

- The Common Ground (Required; up to 31 credits)
New General Education Requirements

- The Common Ground (Required; up to 31 credits)
- Shared Goals (Recommended)
- Foundations
  - Writing: English Composition (3 credits, minimum $C^-$)
  - Mathematical Modeling (3-4 credits, passing grade)
The Common Ground

- **Foundations**
  - Writing: English Composition (3 credits, minimum C−)
  - Mathematical Modeling (3-4 credits, passing grade)

- **Breadth of Inquiry**
  - Arts and Humanities (2 courses, 6 credits)
  - Social and Historical Studies (2 courses, 6 credits)
  - Natural and Mathematical Sciences (5-6 credits; two courses OR a single 5-credit course that includes a substantial lab component)

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The Common Ground

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  - Social and Historical Studies (2 courses, 6 credits)
  - Natural and Mathematical Sciences (5-6 credits; two courses OR a single 5-credit course that includes a substantial lab component)

- **World Languages and Cultures (6 credits)**
  - Language Study (6 credits), or
  - World Culture Courses (6 credits), or
  - International Experience (6 credits)
Shared Goals

▶ Intensive Writing
Shared Goals

- Intensive Writing
- Information Fluency
Shared Goals

- Intensive Writing
- Information Fluency
- Diversity in the United States
Shared Goals

- Intensive Writing
- Information Fluency
- Diversity in the United States
- Enriching Educational Experiences
We recommend adding Intensive Writing
(200 or higher level int. writing course, minimum C)
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We recommend removing **Oral Communication (3 credits)**,
(e.g., CMCL-C121 Public Speaking)
Revisions recommended by UGP Committee

- We recommend **adding Intensive Writing** (200 or higher level int. writing course, minimum C)
- We recommend **removing Oral Communication (3 credits)**, (e.g., CMCL-C121 Public Speaking)
- We recommend **adding a new item to Quantitative and Analytical Skills**, (9-10 credits)
Revisions recommended by UGP Committee

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  - Statistics Courses: SPEA K-300, etc
Revisions recommended by UGP Committee

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- We recommend adding a new item to Quantitative and Analytical Skills, (9-10 credits)
  - Statistics Courses: SPEA K-300, etc
  - MATH-M118, Finite Mathematics (or equivalent), minimum C. Exemption: only by credit for either Finite Mathematics, or Probability Theory, or Discrete Mathematics at 100 or higher level, or CSCI-C241. Minimum grade of C in either case.
Revisions recommended by UGP Committee

- We recommend adding **Intensive Writing**
  (200 or higher level int. writing course, minimum C)

- We recommend removing **Oral Communication (3 credits)**,
  (e.g., CMCL-C121 Public Speaking)

- We recommend adding a new item to **Quantitative and Analytical Skills**, (9-10 credits)
  - Statistics Courses: SPEA K-300, etc
  - MATH-M118, Finite Mathematics (or equivalent), minimum C.
    Exemption: only by credit for either Finite Mathematics, or Probability Theory, or Discrete Mathematics at 100 or higher level, or CSCI-C241.
    Minimum grade of C in either case.
  - **NEW**: one course from the list below
    (3-4 credits, minimum C−):

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1. MATH-M211: Calculus I (4 cr.)
2. MATH-M212: Calculus II (4 cr.)
3. CSCI-C241: Discrete Structures for Computer Science (3 cr.)
4. MATH-M301: Linear Algebra and Applications (3 cr.)
5. MATH-M303: Linear Algebra for Undergraduates (3 cr.)
6. MATH-M337: Mathematics and Art (3 cr.)
7. MATH-M348: Discrete Mathematical Models (3 cr.)
8. MATH-M353: Discrete Mathematics (3 cr.)
9. MATH-M371: Elementary Computational Methods (3 cr.)
10. MATH-M384: Modal Logic (3 cr.)
11. MATH-M385: Mathematics from Language (3 cr.)
12. PHIL-P251: P251 Intermediate Symbolic Logic (3 cr.)
13. PHIL-P350: P350 Logic of Sets (3 cr.)
Informatics Core Requirements (38 credits)

1. Informatics core courses (26 credits)
2. 2 Advanced Informatics courses (6 credits)
3. 2 Informatics electives (6 credits)
New Informatics BSc Program

- Informatics Core Requirements (38 credits)
  1. Informatics core courses (26 credits)
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  3. 2 Informatics electives (6 credits)

- Capstone (6 credits)
New Informatics BSc Program

- Informatics Core Requirements (38 credits)
  1. Informatics core courses (26 credits)
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- Capstone (6 credits)

- Cognate area (15-18 credits)
New Informatics BSc Program

- Informatics Core Requirements (38 credits)
  1. Informatics core courses (26 credits)
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  3. 2 Informatics electives (6 credits)

- Capstone (6 credits)

- Cognate area (15-18 credits)

- General Education Requirements (32-34 credits)
  1. English Composition (3 credits)
  2. Mathematical Modeling (3-4 credits)
  3. Natural and Mathematical Sciences (8-9 credits: three courses, or two courses where one is a 5-credit course with major lab component and 1 is a 3-credit course)
  4. Arts and Humanities (6 credits)
  5. Social and Historical Sciences (6 credits)
  6. World Languages and Cultures (6 credits)
Additional Requirements (15-16 credits)

1. Ethics (3 credits):
2. Intensive writing (3 credits)
3. Quantitative and Analytical Skills (9-10 credits)
Additional Requirements (15-16 credits)

1. Ethics (3 credits):
2. Intensive writing (3 credits)
3. Quantitative and Analytical Skills (9-10 credits)

General Electives (10-16 credits)
What about Shared Goals?

- Intensive Writing ✓
What about Shared Goals?

- Intensive Writing ✓
- Information Fluency
What about Shared Goals?

- Intensive Writing
- Information Fluency
- Diversity in the United States
What about Shared Goals?

- Intensive Writing ✓
- Information Fluency
- Diversity in the United States
- Enriching Educational Experiences ✓
Motion I: There shall be an intensive writing requirement to be completed after English Composition requirement is satisfied. (3 credits, minimum C.)
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Motion II: Oral Communication shall no longer be a degree requirement.
Motion I: There shall be an intensive writing requirement to be completed after English Composition requirement is satisfied. (3 credits, minimum C.)

Motion II: Oral Communication shall no longer be a degree requirement.

Motion III: Students are required to take 12 credit hours of informatics electives; 6 credits must be Informatics courses (i.e. INFO-I or CSCI-C coded courses) at 300 or higher level.
Motion IV: The minimum grade requirement for General Education’s English Composition shall be C.
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Motion V: M118-Finite Mathematics: exemption shall be only by credit for either Discrete Mathematics, or Finite Mathematics, or Probability Theory at 100 or higher level, or C241 (Discrete Structures for Computer Science) with a minimum grade of C in either case.
▶ **Motion IV:** The minimum grade requirement for General Education’s English Composition shall be $C$.

▶ **Motion V:** M118-Finite Mathematics: exemption shall be only by credit for either Discrete Mathematics, or Finite Mathematics, or Probability Theory at 100 or higher level, or C241 (Discrete Structures for Computer Science) with a minimum grade of $C$ in either case.

▶ **Motion VI:** New curriculum shall go into effect in Summer 2010.
There shall be a new math requirement (3-4 credits, minimum \( C^- \)) from an approved list. The latter list shall be maintained by the undergraduate program committee.
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2. MATH-M212: Calculus II (4 cr.)
3. CSCI-C241: Discrete Structures for Computer Science (3 cr.)
4. MATH-M301: Linear Algebra and Applications (3 cr.)
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