

# **graduate COMMITTEE curriculum PROPOSAL FORM**

## A. Cover page (rover over text for more instructions- please delete red instructions)

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| A.1[. Course or program](#_acknowledge) | **HCA 552 Introduction to Health care Information Systems** |  |
| Academic Unit | School of Business |  |
| A.2. [Proposal type](#type) | Course: **creation**   |  |
| A.3. [Originator](#Originator) | Marianne RaimondoSankeerth Rampa | [Home department](#home_dept) | Health Care Administration |
| A.4. [Rationale](#Rationale)Additional Information for [new programs](#type) | This new course will serve as a required component of the MS in Health Care Administration - Data Analytics Concentration. This course introduces students to the intricate information systems within the healthcare industry, vital for healthcare providers, insurers, regulators, accrediting bodies, and other professional organizations. Various datasets, including financial/charge data, clinical data, and utilization data, will be presented for data reporting and analysis. The course also covers diverse coding systems for medical diagnoses/conditions, services, supplies, testing, and procedures, such as ICD-10, CPT, HCC, HCPCS, and others. Additionally, students will develop familiarity with contemporary healthcare trends driving the evolution of healthcare information systems, including value-based payment, population health, and telehealth. Real-world case studies and examples illustrating how regulators, policy makers, insurers, and providers utilize data to monitor healthcare service utilization, payment, quality, reduce costs, and enhance population health will be included. |
| A.5. [Student impact](#student_impact) | * New course in MS in Health Care Administration - Data analytics concentration.
* Prepares students and health care/IT professionals for in demand jobs with updated skill sets in health care information systems and data analysis.
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| A.6. [Impact on other programs](#impact) | Could serve as a pipeline to MS HCA |
| A.7. [Resource impact](#Resource) | [Faculty PT & FT](#faculty" \o "Need to hire new full-time or part-time faculty? This is where you indicate if this proposal will be affecting FLH in your department/program.):  | Full time or adjuncts from industry |
|  | [Library:](#library) | None |
|  | [Technology](#technology) | None |
|  | [Facilities](#facilities): | None, will use existing classrooms and computer labs  |
| A.8. [Semester effective](#Semester_effective) | Spring 2024 or Fall 2024 | A.9. [Rationale if sooner than next Fall](#Semester_effective) |  |
| A.10 [Changes to the website](#Signature_2) |  |

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| A.10. INSTRUCTIONS FOR CATALOG COPY: This single file copy must include all relevant pages from the college catalog, and show how the catalog will be revised. (1) Go to the “Forms and Information” on the graduate committee’s website <https://www.ric.edu/department-directory/graduate-curriculum-committee/forms-and-information>Scroll down until you see the Word files for the current catalog. (2) Download ALL catalog sections relevant for this proposal, including course descriptions and/or other affected programs. (3) Place ALL relevant catalog copy into a single file. Put page breaks between sections and delete any catalog pages not relevant for this proposal. (4) Using the track changes function, revise the catalog pages to demonstrate what the information should look like in next year’s catalog. (5) Check the revised catalog pages against the proposal, making sure that program totals are correct when adding or deleting course credits. |

## B. NEW OR REVISED COURSES

|  | Old ([for revisions only](#Revisions))ONLY include information that is being revised, otherwise leave blank | NewExamples are provided within some of the boxes for guidance, delete just the examples that do not apply. |
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| B.1. [Course prefix and number](#cours_title)  |  | HCA 552 |
| B.2. Cross listing number if any |  |  |
| B.3. [Course title](#title)  |  | Introduction to Heath Care Information Systems |
| B.4. [Course description](#description)  |  | Students will be introduced to information systems and data sets used by health care organizations, various coding systems for medical diagnoses/conditions, services, supplies, testing, and procedures will be presented. |
| B.5. [Prerequisite(s)](#prereqs) |  | Acceptance into the HCA graduate certificate program or permission of the program director. |
| B.6. [Offered](#Offered) |  | Fall  |
| B.7. [Contact hours](#contacthours)  |  | 3 |
| B.8. [Credit hours](#credits) |  | 3 |
| B.9. [Justify differences if any](#differences) |  |
| B.10. [Grading system](#grading)  |  | Letter grade  |
| B.11. [Instructional methods](#instr_methods) |  | Lecture Small group  |
| B.11.a [Delivery Method](#instr_methods) |  | Hybrid |
| B.12.[Categories](#required) |  | Required for program  |
| B.13. [How will student performance be evaluated?](#performance) |  | Attendance Class participation Exams Presentations Projects Papers and/or Case Studies |
| B.14. [Redundancy with, existing courses](#competing) |  | None |
| B. 15. Other changes, if any |  |

| B.16. [Course learning outcomes](#outcomes): List each outcome in a separate row | [Professional organization standard(s)](#standards), if relevant  | [How will each outcome be measured?](#measured) |
| --- | --- | --- |
| Students will have knowledge of health care databases including clinical, financial, and utilization and the types of data/data sources in these information systems. | ICABE | Written exams, practical assessments, and presentations will be used to evaluate students' theoretical understanding and practical skills in navigating and analyzing health care databases.  |
| Students will understand how coding systems are constructed for various data sets including medical diagnoses, procedures, and services. | ICABE | Assignments or exams where students construct coding systems for medical diagnoses, procedures, and services.  |
| Students will know the requirements of regulations, insurers, and accreditation bodies for merging of data files. | ICABE | Assignments and exams will assess theoretical understanding, and a final project will evaluate the practical application of merging data files while adhering to regulatory requirements.  |
| Students will learn how policy makers, regulators, payers, and providers use data for decision making. | ICABE | Assignments, exams, and presentations will evaluate theoretical knowledge, while final projects and case study discussions will assess practical application and problem-solving skills in decision-making scenarios. |

| B.17. [Topical outline](#outline): Please do not include a full syllabus |
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| 1: Introduction to Healthcare Information Systems * Definition and significance of healthcare information systems
* Historical evolution and milestones
* Key stakeholders and their roles
* Challenges and opportunities in healthcare informatics

2: Types of Healthcare Information Systems * Electronic Health Records (EHRs) Health Information Exchange (HIE) Health Information Management (HIM) systems Picture Archiving and Communication Systems (PACS) Laboratory Information Systems (LIS) Pharmacy Information Systems.

3: Data Collection and Management* Explore data sources in healthcare (e.g., patient records, claims data)
* Data collection methods and tools
* Data quality, privacy, and security
* Coding for medical diagnoses, procedures, services (ICD10, CPT, Other) data/databases
* Data file merges requirements

4: Interoperability and Integration * Importance of interoperability
* Health Information Exchange (HIE) and its role
* Standards and protocols for interoperability
* Challenges and solutions in healthcare data integration
* HIPAA (Health Insurance Portability and Accountability Act) and its implications
* Meaningful Use and EHR incentives Ethical considerations in healthcare data management Patient data privacy and consent

5: Healthcare Data * How data Is used for decision making in health care
* Role of healthcare information systems in analytics

6: Case Studies and Real-World Applications * Analysis of healthcare organizations successfully implementing information systems
* Examples of improved patient care and operational efficiency
* Challenges and lessons learned

7: Future Trends in Healthcare Informatics. * Emerging Technologies in Healthcare Informatics Telehealth and telemedicine Internet of Things (IoT) in healthcare Artificial intelligence and machine learning applications Wearable health technology
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## D. Signatures

##### D.1. Approvals:

##### Required from department chairs, program directors, and deans from the academic unit originating the proposal.

| Name | Position/affiliation | [Signature](#_Signature) | Date |
| --- | --- | --- | --- |
| Marianne Raimondo | Program Director of HCA (Health Care Administration) | *Marianne Raimondo MS, MSW, Ph. D* | 11/14/23 |
| Justin Feeney | Chair of Department of Management and Marketing |  | 11/08/23 |
| Marianne Raimondo | Dean of School of Business | *Marianne Raimondo MS, MSW, Ph. D* | 11/14/23 |

##### D.2. [Acknowledgements](#acknowledge):

##### Required from all departments (and corresponding dean) impacted by the proposal. Signature does not indicate approval. Concerns should be brought to the attention of the graduate committee chair for discussion.

| Name | Position/affiliation | [Signature](#Signature_2) | Date |
| --- | --- | --- | --- |
| Suzanne Mello-Stark | Chair of Department of Computer Science and Information Systems |  | 11/15/23 |