

Calculus III-14304 MATH-2415

RT 2022 Section 483 4 Credits 01/18/2022 to 05/15/2022 Modified 01/18/2022

Course Meetings

Course Modality

WS Online on a Schedule

Meeting Days

Monday Wednesday

Meeting Times

12 - 1:50 PM

Meeting Location

Cisco Webex

Welcome and Instructor Information

Instructor: Mr Domingo Javier Litong

Email: domingo.litong@hccs.edu

Office: Katy Campus 359 Phone: 7137185473

Website: https://learning.hccs.edu/faculty/domingo.litong (https://learning.hccs.edu/faculty/domingo.litong)

What's Exciting About This Course

The goal is for you to be able to do math on your own. You will own your solutions and not just depend on examples or solution manual. You will become independent in your thinking. You will become creative in solving problems.

My Personal Welcome

Welcome to the class! Learning math is doing math. We'll look at the theorems, axioms, properties, and definitions that lay the foundation of the course. We'll work out problems that should solidify our grasp of the concepts and show the practical applications of those concepts. For every section we will cover in class, there are carefully chosen exercises for you to practice on in the HW sets, and this is when your own learning really takes shape.

<u>I emphasize the importance of doing homework.</u> Though I try to include different problems for each section, it is not possible to exhaust all types of situations. You must discover some of them yourself, and this is when you learn to think independently, making the resolutions to those problems your own. I guarantee that your moments of 'Eureka!' will be just as exhilarating as overcoming a seemingly impossible obstacle.

I understand that there will always be some obnoxious problems, and these types of problems are the ones that will teach you and will make you crave for more. When that moment arrives, your journey has begun, and I would have achieved my goal as your teacher. You will then look with a different eye at those mathematicians of long ago on whose shoulders we stand today.

Preferred Method of Contact

CANVAS email: click on INBOX and specify TEACHER (see icon in the first column to the left) Please do not use my school email.

I will respond to emails within 24 hours Monday through Friday; I will reply to weekend messages on Monday mornings.

Office Hours

Monday and Wednesday 2 - 3 PM virtual via Webex

Tuesday and Thursday 12 - 1:30 PM in person, Rm 359 Katy Campus



Course Description

MATH 2415 - Calculus III Credits: 4 (4 lecture). This course is intended for students who are pursuing degrees in mathematical sciences and engineering and who are required by the nature of their respective curricula to enroll in the 3-semester calculus series. It provides a detailed study of vector-valued functions with space geometry. Functions of several variables and Lagrange multipliers. Multiple integration with applications, as well as integration in polar, spherical, and cylindrical coordinates. Change of variables and Jacobians. It also covers vector analysis that includes Green's theorem, Divergence theorem, and Stokes' theorem. Core Curriculum Course.

Prerequisites

Math 2414: Pass with a "C" or better.

Department Website

https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/

O Core Curriculum Objectives (CCOs)

Given the rapid evolution of necessary knowledge and skills and the need to take into account global, national, state, and local cultures, the core curriculum must ensure that students will develop the essential knowledge and skills they need to be successful in college, in a career, in their communities, and in life. Through the Texas Core Curriculum, students will gain a foundation of knowledge of human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning.

- Critical Thinking: to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
- Communication Skills: to include effective development, interpretation and expression of ideas through written, oral and visual communication.
- Quantitative and Empirical Literacy. to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Student Learning Outcomes and Objectives

Program Student Learning Outcomes (PSLOs)

Students in the Mathematics Program will:

- 1. Engage in problem solving strategies, such as organizing information, drawing diagrams and modeling.
- 2. Use symbolic representations to solve problems. This includes manipulating formulas, solving equations, and graphing lines.
- 3. Build the foundational mathematical skills that will enable a student to successfully complete a college level mathematics course.

Course Student Learning Outcomes (CSLOs)

Upon completion of MATH 2415, the student will be able to:

- 1. Perform calculus operations on vector-valued functions, including derivatives, integrals, curvature, displacement, velocity, acceleration, and torsion.
- 2. Perform calculus operations on functions of several variables, including partial derivatives, directional derivatives, and multiple integrals.
- 3. Find extrema and tangent planes.
- 4. Solve problems using the Fundamental Theorem of Line Integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem.
- 5. Apply the computational and conceptual principles of calculus to the solutions of real-world problems.

Learning Objectives

Upon completion of MATH 2415, the student will be able to:

- 1. Understand and perform vector operations, and analyze vectors in space.
- 2. Understand the geometry of space, including lines, planes, surfaces, and cylindrical and Spherical Coordinates
- 3. Perform differentiation and integration of Vector-Valued Functions.
- 4. Describe velocity and acceleration associated with a Vector-Valued Function.
- 5. Use a Vector-Valued Function to analyze projectile motion.
- 6. Understand tangent vectors and normal and find the tangential and normal components of acceleration.
- 7. Find the arc length of a space curve, and the curvature of a curve at a point.
- 8. Understand functions of several variables, including sketching graphs, level curves and surfaces.
- 9. Find and use partial derivatives, directional derivatives and gradient, absolute and relative extrema of a function of two or more variables, including implicitly and use the chain rule.
- 10. Solve optimization problems and use the method of least squares, and Lagrange Multipliers
- 11. Evaluate and use an iterated integral to find the area of a plane
- 12. Evaluate and use double integrals as an iterated integral, and in polar coordinates, to find mass and center of mass of a planar lamina, moments of inertia, and area of a surface.
- 13. Evaluate and use triple integrals to find volume, center of mass, and moments of inertia of a solid region, and in cylindrical and spherical coordinates.
- 14. Understand and use a Jacobian to change variables in a double integral
- 15. Understand the curl and divergence of Vector Fields, and

- 16. Evaluate line integrals and understand Conservative Vector fields and
- 17. Understand and use Green's, Divergence, and Stokes's Theorems
- 18. Find parametric equations for surfaces.
- 19. Evaluate and use surface integrals

This course provides a detailed study of vector-valued functions with space geometry. Functions of several variables and Lagrange multipliers. Multiple integration with applications, as well as integration in polar, spherical, and cylindrical coordinates. Change of variables and Jacobians. And finally, vector analysis that includes Green's theorem, Divergence theorem, and Stokes' theorem.

□ Departmental Practices and Procedures

The Mathematics Department has specific expectations for calculators, proctored exams and grading policies. Refer to the Course Requirements and Devices sections below.

🖪 Instructional Materials and Resources

Instructional Materials

The <u>HCC Online Bookstore (https://hccs.bncollege.com/shop/hccs-central/page/find-textbooks)</u> provides searchable information on textbooks for all courses. Students will access WebAssign course materials through a link in Canvas.

Temporary Free Access to E-Book

You have a 14-day free access to WebAssign from the first day of class via our Canvas course.

Other Instructional Resources

WebAssign

WebAssign is required online HW.

Calculus

Author: Ron Larson & Bruce Edwards

Publisher: Cengage Edition: 11th

ISBN: 13: 978-1337275347

Textbook Options for: Calculus, 11th Edition, by Ron Larson & Bruce H. Edwards

Loose-leaf Textbook + WebAssign Multi-Term Printed Access Card: Edwards ISBN-13: 978-1337604741

Hardbound Textbook + WebAssign Multi-Term Printed Access Card: Edwards ISBN-13: 978-1337604758

Hardbound Textbook: ISBN-13: 978-1337275347

WebAssign Multi-Term Printed Access Card: ISBN-13: 978-1285858265

✓ Course Requirements

Assignments, Exams, and Activities

Туре	Weight	Topic	c Notes	
Exams / Homework	75%		There are 4 unit exams. The overall HW grade at the end of the semester may replace the lowest exam grade.	
Final Exam	25%		This is comprehensive. The test includes all sections covered in class from Chapter 11 through Chapter 15.	

Туре	Weight	Topic	Notes
In-Class Activities / Discussion			This may refer to either your participation in class activities or submission to Discussion posts in Canvas that earns bonus points to supplement your exam score.
			Participation in class is either as an individual or as a team. You may take a screen shot of the screen during online activities or respond to the following 4 questions for documentation and submission:
			1. When and what time did you receive the bonus point(s)?
			2. What was my question?
			3. What was your response?
			4. How many bonus points did you receive?

Grading Formula

Grade	Range	Notes
FORMULA		[(Best 4 grades of Exam 1, Exam 2, Exam 3, Exam 4 and HW) + Final Exam] / 4 = Course Grade/Average
А	90 to 100	
В	80 to 89	
С	70 to 79	
D	60 to 69	
F	0 to 59	

Instructor's Practices and Procedures

Incomplete Policy

In order to receive a grade of Incomplete ("I"), a student must have completed at least 85% of the work in the course. In all cases, the instructor reserves the right to decline a student's request to receive a grade of Incomplete.

Missed Assignments/Make-Up Policy

There is no makeup for any missed exam ---the overall HW grade will simply replace the zero-exam grade. Any student who misses TWO exams successively must repeat the course.

Homework prepares you for the exam and thus, it is due the day before the exam.

WebAssign automatically assigns a grade of zero to undone HW.

Academic Integrity

All forms of academic dishonesty including, but not limited to cheating, plagiarism, and collusion are serious offenses. Possible consequences for academic dishonesty include a grade of 0 (zero) or F in the particular assignment, failure in the course, and/or recommendations for probation or dismissal from the institution.

Here's the link to the HCC information about academic integrity (Scholastic Dishonesty and Violation of Academic Scholastic Dishonesty and Grievance):

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-procedures/ (https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/)

Attendance Procedures

I check attendance at random times during online/face2face class. I require face camera ON the entire class period. The last day to withdraw is on April 4, 2022.

Student Conduct

As college students, I expect you to behave like responsible adults.

Devices

You may use ANY calculator in class and in doing HW. Use the calculator to check your work but not to do your work. During exams, I do not allow calculators (https://eagleonline.hccs.edu/files/folder/users_3188/calc?preview=31308103) that can graph, integrate or differentiate.

Faculty Statement about Student Success

Active participation in class discussion is a must. Your responses to my questions give me the direction to steer the discussion.

Individual practice by doing the homework is just as important. You must know how to interpret directions and do correctly what they require. Use math vocabulary. Ask me questions if you are stuck in a problem.

Form study groups. Learn from each other. Be a good friend.

Faculty-Specific Information Regarding Canvas

This course section will use Canvas (https://eagleonline.hccs.edu (<a href="https://eagleonline.hccs.edu"

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, use Canvas with the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

Social Justice Statement

Houston Community College is committed to furthering the cause of social justice in our community and beyond. HCC does not discriminate on the basis of race, color, religion, sex, gender identity and expression, national origin, age, disability, sexual orientation, or veteran status. I fully support that commitment and, as such, will work to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. In this course, we share in the creation and maintenance of a positive and safe learning environment. Part of this process includes acknowledging and embracing the differences among us in order to establish and reinforce that each one of us matters. I appreciate your suggestions about how to best maintain this environment of respect. If you experience any type of discrimination, please contact me and/or the Office of Institutional Equity at 713-718-8271.

血 HCC Policies and Information

HCC Grading System

HCC uses the following standard grading system:

Grade	Grade Interpretation	Grade Points		
А	Excellent (90-100)	4		
В	Good (80-89)	3		
С	Fair (70-79)	2		
D	Passing (60-69), except in developmental courses.	1		
F	Failing (59 and below)	0		
FX	Failing due to non-attendance	0		
W	Withdrawn	0		
I	Incomplete	0		
AUD	Audit	0		
IP	In Progress. Given only in certain developmental courses. A student must re-enroll to receive credit.	0		

Grade	Grade Interpretation	Grade Points
COM	Completed. Given in non-credit and continuing education courses.	0

Link to Policies in Catalog and Student Handbook

Here's the link to the HCC Catalog and Student Handbook: https://catalog.hccs.edu/ (https://ca

In it you will find information about the following:

- Academic Information
- Academic Support
- Attendance, Repeating Courses, and Withdrawal
- · Career Planning and Job Search
- Childcare
- disAbility Support Services
- Electronic Devices
- Equal Educational Opportunity
- Financial Aid TV (FATV)
- General Student Complaints
- Grade of FX
- Incomplete Grades
- International Student Services
- Health Awareness
- Libraries/Bookstore
- Police Services & Campus Safety
- Student Life at HCC
- Student Rights and Responsibilities
- Student Services
- Testing
- Transfer Planning
- Veteran Services

Link to HCC Academic Integrity Statement

https://www.hccs.edu/student-conduct (https://www.hccs.edu/student-conduct) (scroll down to subsections)

Campus Carry Link

Here's the link to the HCC information about Campus Carry:

https://www.hccs.edu/campuscarry (https://www.hccs.edu/campuscarry)

HCC Email Policy

When communicating via email, HCC requires students to communicate only through the HCC email system to protect your privacy. If you have not activated your HCC student email account, you can go to HCC Eagle ID (https://www.hccs.edu/email) and activate it now. You may also use Canvas Inbox to communicate.

Office of Institutional Equity

Use the following link to access the HCC Office of Institutional Equity, Inclusion, and Engagement: https://www.hccs.edu/eeo)

Ability Services

HCC strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including long and short term conditions, mental health, chronic or temporary medical conditions), please meet with a campus Abilities Counselor as soon as possible in order to establish reasonable accommodations. Reasonable accommodations are established through an interactive process between you, your instructor(s) and Ability Services. It is the policy and practice of HCC to create inclusive and accessible learning environments consistent with federal and state law. For more information, please go to https://www.hccs.edu/accessibility/

Houston Community College is committed to cultivating an environment free from inappropriate conduct of a sexual or gender-based nature including sex discrimination, sexual assault, sexual harassment, and sexual violence. Sex discrimination includes all forms of sexual and gender-based misconduct and violates an individual's fundamental rights and personal dignity. Title IX prohibits discrimination on the basis of sex-including pregnancy and parental status in educational programs and activities. If you require an accommodation due to pregnancy please contact an Abilities Services Counselor. The Director of EEO/Compliance is designated as the Title IX Coordinator and Section 504 Coordinator. All inquiries concerning HCC policies, compliance with applicable laws, statutes, and regulations (such as Title VI, Title IX, and Section 504), and complaints may be directed to:

David Cross
Director EEO/Compliance
Office of Institutional Equity & Diversity
3100 Main
(713) 718-8271

Houston, TX 77266-7517 or Institutional. Equity@hccs.edu (mailto:Institutional. Equity@hccs.edu)

https://www.hccs.edu/titleix (https://www.hccs.edu/titleix)

Office of the Dean of Students

Contact the office of the Dean of Students to seek assistance in determining the correct complaint procedure to follow or to identify the appropriate academic dean or supervisor for informal resolution of complaints.

https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/ (https://www.hccs.edu/about-hcc/procedures/student-rights-policies--procedures/student-complaints/speak-with-the-dean-of-students/)

Student Success

Expect to spend at least twice as many hours per week outside of class as you do in class studying the course content. Additional time will be required for written assignments. The assignments provided will help you use your study hours wisely. Successful completion of this course requires a combination of the following:

- Reading the textbook
- Attending class in person and/or online
- Completing assignments
- · Participating in class activities

There is no short cut for success in this course; it requires reading (and probably re-reading) and studying the material using the course objectives as a guide.

Canvas Learning Management System

Canvas is HCC's Learning Management System (LMS), and can be accessed at the following URL:

https://eagleonline.hccs.edu (https://eagleonline.hccs.edu)

HCCS Open Lab locations may be used to access the Internet and Canvas. For best performance, Canvas should be used on the current or first previous major release of Chrome, Firefox, Edge, or Safari. Because it's built using web standards, Canvas runs on Windows, Mac, Linux, iOS, Android, or any other device with a modern web browser.

Canvas only requires an operating system that can run the latest compatible web browsers. Your computer operating system should be kept up to date with the latest recommended security updates and upgrades.

HCC Online Information and Policies

Here is the link to information about HCC Online classes, which includes access to the required Online Information Class Preview for all fully online classes: https://www.hccs.edu/online/ (https://www.hccs.edu/on

Scoring Rubrics, Sample Assignments, etc.

Look in Canvas for the scoring rubrics for assignments, samples of class assignments, and other information to assist you in the course. https://eagleonline.hccs.edu/ (https://eagleonline.hccs.edu/)

Instructor and Student Responsibilities

As your Instructor, it is my responsibility to:

- · Provide the grading scale and detailed grading formula explaining how student grades are to be derived
- Facilitate an effective learning environment through learner-centered instructional techniques
- Provide a description of any special projects or assignments
- Inform students of policies such as attendance, withdrawal, tardiness, and making up assignments
- Provide the course outline and class calendar that will include a description of any special projects or assignments
- Arrange to meet with individual students during office hours, and before and after class as required

As a student, it is your responsibility to:

- Attend class in person and/or online
- Participate actively by reviewing course material, interacting with classmates, and responding promptly in your communication with me
- Read and comprehend the textbook
- Complete the required assignments and exams
- Ask for help when there is a question or problem
- Keep copies of all paperwork, including this syllabus, handouts, and all assignments
- Be aware of and comply with academic honesty policies in the HCCS Student Handbook (https://www.hccs.edu/studenthandbook))

EGLS3

The EGLS³ (Evaluation for Greater Learning Student Survey System (https://www.hccs.edu/egls3)) will be available for most courses near the end of the term until finals start. This brief survey will give invaluable information to your faculty about their teaching. Results are anonymous and will be available to faculty and division chairs after the end of the term. EGLS³ surveys are only available for the Fall and Spring semesters. -EGLS3 surveys are not offered during the Summer semester due to logistical constraints.

https://www.hccs.edu/egls3 (https://www.hccs.edu/egls3)

Housing and Food Assistance for Students

Any student who faces challenges securing their foods or housing and believes this may affect their performance in the course is urged to contact the Dean of Students at their college for support. Furthermore, please notify the professor if you are comfortable in doing so.

This will enable HCC to provide any resources that HCC may possess.

Student Resources

Tutoring

HCC provides free, confidential, and convenient academic support, including writing critiques, to HCC students in an online environment and on campus. Tutoring is provided by HCC personnel in order to ensure that it is contextual and appropriate. Visit the HCC Tutoring Services
(https://www.hccs.edu/tutoring) website for services provided.

Libraries

The HCC Library System consists of 9 libraries and 6 Electronic Resource Centers (ERCs) that are inviting places to study and collaborate on projects. Librarians are available both at the libraries and online to show you how to locate and use the resources you need. The libraries maintain a large selection of electronic resources as well as collections of books, magazines, newspapers, and audiovisual materials. The portal to all libraries' resources and services is the HCCS library web page at <a href="https://library.hccs.edu/https://libra

Supplementary Instruction

Supplemental Instruction is an academic enrichment and support program that uses peer-assisted study sessions to improve student retention and success in historically difficult courses. Peer Support is provided by students who have already succeeded in completion of the specified course, and who earned a grade of A or B. Find details at https://www.hccs.edu/supplemental-instruction)

Resources for Students:

https://www.hccs.edu/covid19students (https://www.hccs.edu/covid19students)

Basic Needs Resources:

https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/ (https://www.hccs.edu/support-services/counseling/hcc-cares/basic-needs-resources/)

Student Basic Needs Application:

https://www.hccs.edu/basicneeds (https://www.hccs.edu/basicneeds)

COVID-19

Here's the link to the HCC information about COVID-19:

https://www.hccs.edu/covid-19 (https://www.hccs.edu/covid-19)

Sensitive or Mature Course Content

In this college-level course, we may occasionally discuss sensitive or mature content. All members of the classroom environment, from your instructor to your fellow students, are expected to handle potentially controversial subjects with respect and consideration for one another's varied experiences and values.

Instructional Modalities

In-Person (P)

Safe, face-to-face course with scheduled dates and times

Online on a Schedule (WS)

Fully online course with virtual meetings at scheduled dates and times

Online Anytime (WW)

Traditional online course without scheduled meetings

Hybrid (H)

Course that meets safely 50% face-to-face and 50% virtually

Hybrid Lab (HL)

Lab class that meets safely 50% face-to-face and 50% virtually

Copyright Statement

In order to uphold the integrity of the academic environment and protect and foster a cohesive learning environment for all, HCC prohibits unauthorized use of course materials. Materials shared in this course are based on my professional knowledge and experience and are presented in an educational context for the students in the course. Authorized use of course materials is limited to personal study or educational uses. Material should not be shared, distributed, or sold outside the course without permission. Students are also explicitly forbidden in all circumstances from plagiarizing or appropriating course materials. This includes but is not limited to publically posting quizzes, essays, or other materials. This prohibition extends not only during this course, but after. Sharing of the materials in any context will be a violation of the HCC Student Code of Conduct and may subject the student to discipline, as well as any applicable civil or criminal liability. Consequences for unauthorized sharing, plagiarizing, or other methods of academic dishonesty may range from a 0 on the specified assignment and/or up to expulsion from Houston Community College. Questions about this policy may be directed to me or to the Manager of Student Conduct and Academic Integrity.

🛗 Course Calendar

Syllabus Modifications

The instructor reserves the right to modify the syllabus at any time during the semester and will promptly notify students in writing, typically by e-mail, of any such changes.

When	Topic	Notes		
Exam 1 Week 4 02/09/2022 12:00 PM - 1:50 PM Canvas	Chapter 11	HW for these sections are due on Feb 8, 2022		
Exam 2 Week 8 03/09/2022 12:00 PM - 1:50 PM Canvas	Chapter 12	HW for these sections are due on Mar 8, 2022.		
Exam 3 Week 12 04/13/2022 12:00 PM - 1:50 PM Canvas	Chapter 13	HW for these sections are due on Apr 12, 2022.		
Exam 4 Week 15 05/04/2022 12:00 PM - 1:50 PM Canvas	Chapter 14	HW for these sections are due on May 3, 2022		
Final Exam Week 16 05/11/2022 12:00 PM - 1:50 PM Canvas	Chapter 11 through Chapter 15	HW for these sections are due on May 10, 2022.		

Additional Information

Departmental/Program Information

Program Information for Majors: https://www.hccs.edu/programs/areas-of-study/science-technology-engineering--math/mathematics/

HCC Math Student Organization: Mu Alpha Theta: Application: https://www.hccs.edu/resources-for/current-students/stem--science-technology-engineering--mathematics/stem-clubs/mu-alpha-theta-application/

Process for Expressing Concerns about the Course

If you have concerns about any aspect of this course, please reach out to your instructor for assistance first. If your instructor is not able to assist you, then you may wish to contact the Department Chair.

Mathematics Courses

Chair of Math	Mahmoud Basharat	SW Campus	713-718-2438	Stafford Scarcella, N108
- Admin. Assistant	Tiffany Pham	SW Campus	713-718-7770	Stafford Scarcella, N108
- Admin. Assistant	Christopher Cochran	SW Campus	713-718-2477	Stafford Scarcella, N108
Math Assoc. Chair	Jaime Hernandez	CE Campus	713-718-7772	San Jacinto Building, Rm 369
Math Assoc. Chair	Susan Fife	NW Campus	713-718-7241	Katy Campus Building, Rm 112
Math Assoc. Chair	Hien Nguyen	NE Campus	713-718-2440	Northline, Rm 324

Developmental Mathematics Courses

Chair of Dev. Math	Dorothy A. Muhammad	SE Campus	713-718-5846	Felix Morales Building, Rm 124
- Admin. Assistant	Carmen Vasquez	SE Campus	713-718-7056	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Jack Hatton	SE Campus	713-718-2434	Felix Morales Building, Rm 124
Dev. Math Assoc. Chair	Adnan Ulhaque	SW Campus	713-718-5463	Felix Morales Building, Rm 124/ Stafford Scarcella, N108