

# **How to Add Allied Health Options to Your Biology Program**

**Dr. Mitchell Seal**

Dean, School of Online Learning  
University of Incarnate Word  
San Antonio, Texas

**October 5, 2016**

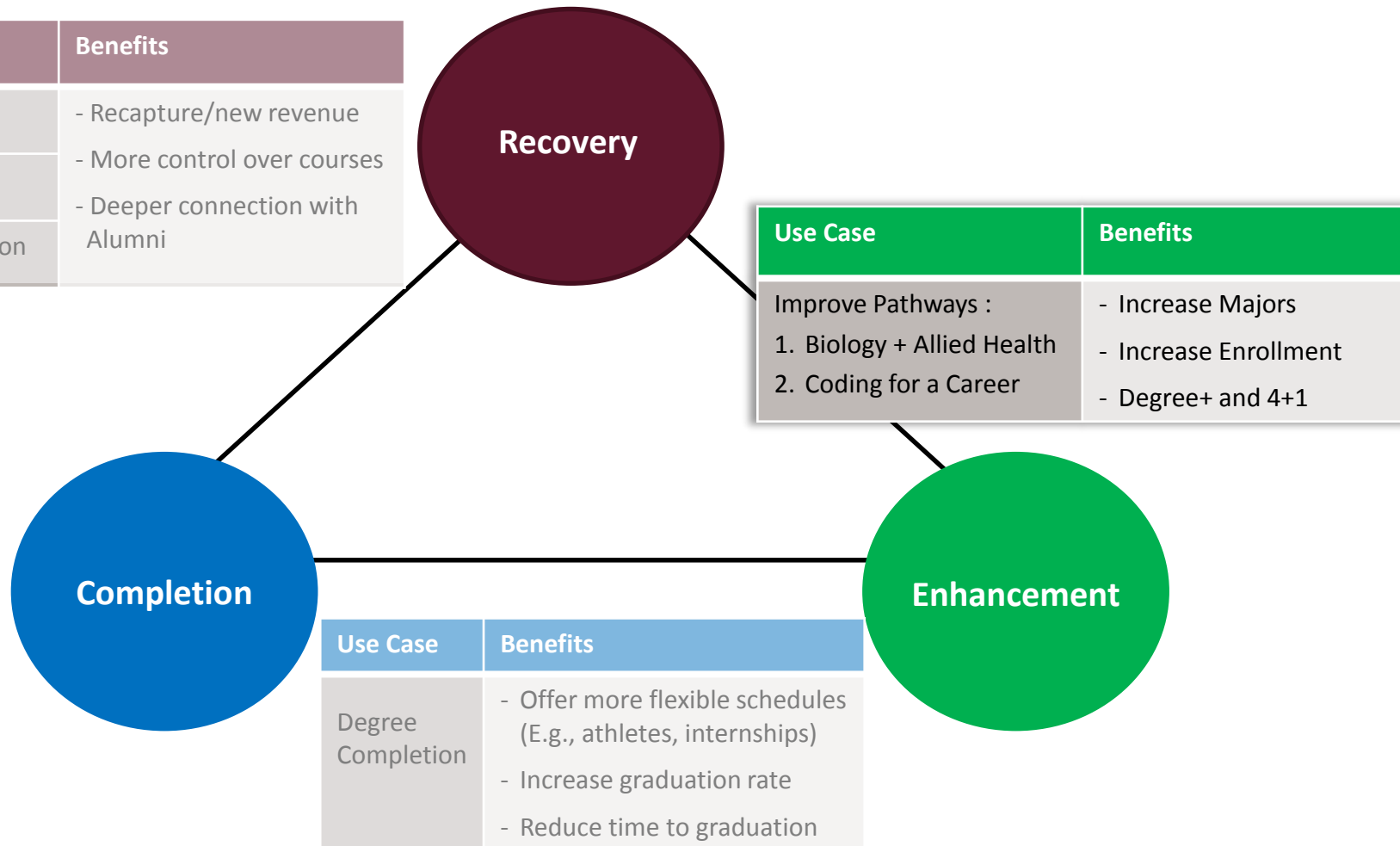
# Adding Allied Health Options through Academic Sharing

- **What?**
  - **Complementary Certificates**
  - **Pre-graduate healthcare tracks**
  - **Academic sharing**
- **Who?**
  - **Dr. Mitchell Seal, Dean, School of Online Learning, Division of Extended Academic Programs (EAP), University of the Incarnate Word (UIW)**
- **Why?**
  - **UIW Online growth rate (Allied Health 2 of top 3 fastest growing programs)**
    - About 14% 6-year average; 25% this year vs. peer average 1-2%
  - **Incredible demand for Allied Health Professionals**
  - **Benefits for schools**
    - Increase enrollment
    - Creates funding source for students while in school

# Dr. Mitchell Seal

- **Dean of the School of Online Learning at the University of the Incarnate Word**
- **Interim Dean College of Allied Health Sciences at the Uniformed Services University of the Health Sciences (Medical, Graduate, & Post Graduate Dental Schools)**
  - Developed Schools of Undergraduate & Graduate Studies
- **Medical Education and Training Campus (METC) in San Antonio, TX.**
  - World's largest allied health campus
  - Advisor and founding educational administrator
- **AS, BSN , MEd-IT, and EdD**
- **Product developer, Ellucian for entirely online competency-based education (CBE)**
- **Honors**
  - Department of Defense Spotlight by the Office of the President of the US
  - American Association of Colleges of Nursing Innovation Award
  - Presidential Award from the Institute for Credentialing Excellence
  - Commendation from the Accreditation Commission for Education in Nursing
- **White House Forum for Military Credentialing, and two White House Roundtables:**
  - Advanced Medical Occupations (LVN, RN & PA), and Emergency Medical Services
  - Efforts reduced the time to and cost of degree completion for the single largest occupational area in the Department of Defense by an average of 50%.
- **National Governor's Association Policy Academy**

# Adding Allied Health Options: Academic Sharing





# Top Industry of Employment for Region: 1990



**Mining, Oil and Gas**



**Manufacturing**



**Transportation & Warehousing**



**Public Administration**



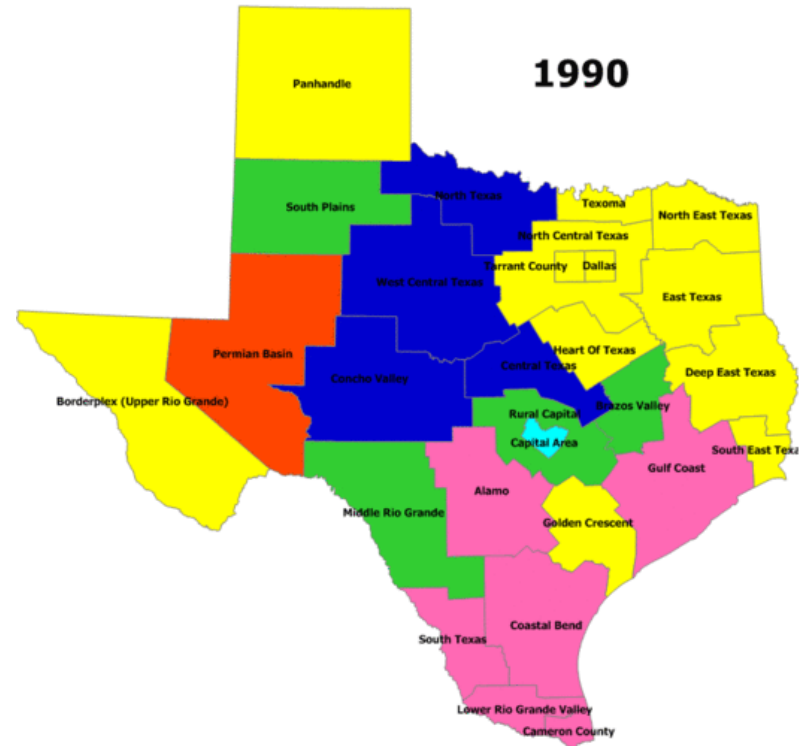
**Health Care & Social Assistance**



**Education Services**



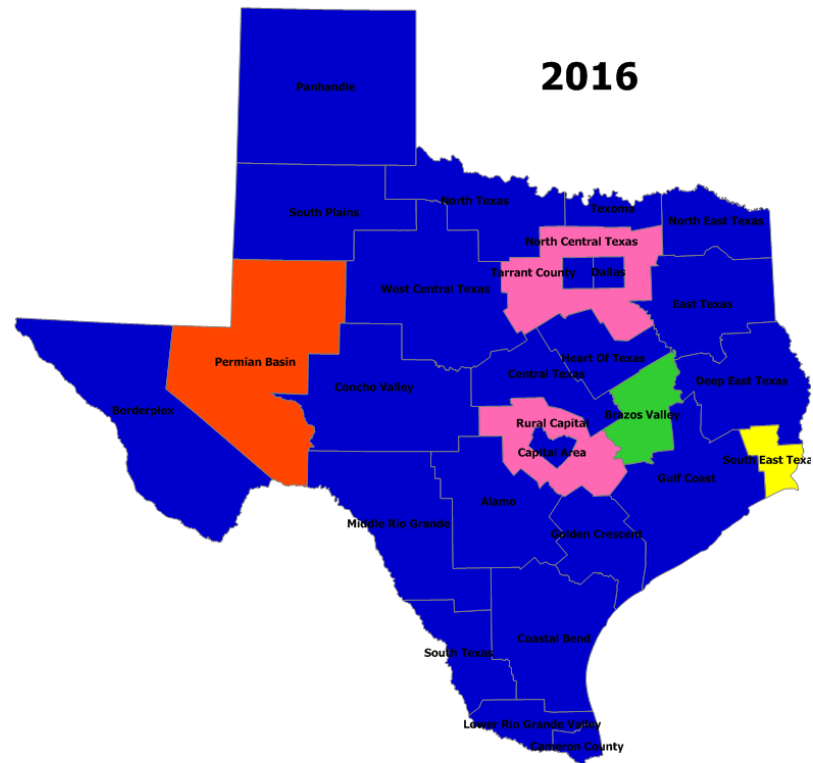
**Retail Trade**



Ranked by QCEW average weekly wages for that industry



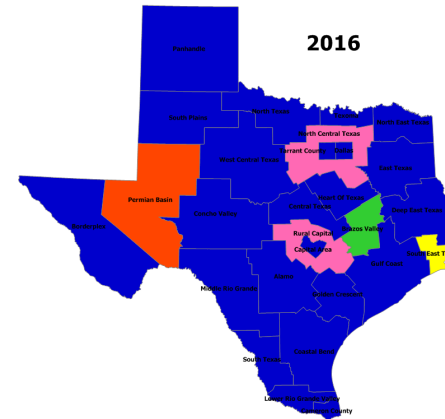
# Top Industry of Employment for Region: 2016



Source: TWC Quarterly Census of Employment & Wages (Ranked by QCEW average weekly wages for that industry)

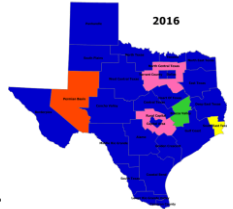
# Demand for Allied Health Science/Care Professionals

- **1 in 4 new jobs in Health Care**
  - Grow by 26% from 2012 - 2022
  - TWC “College Credit for Heroes”
- **Healthcare jobs 85% similar**
  - Administration\*
  - Practitioner
  - Techs\*
  - Support\*
  - Housekeeping/Facilities
- **Healthcare credentials\* (e.g. certification)**



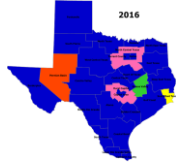
# Adding Allied Health Science/Care Options

- **Biology – a natural fit!**
- **Entry-level allied health jobs (certifications)**
  - Certified Rhythm Analysis Technician; Certified Billing and Coding Specialist; Certified Electronic Health Record Specialist; Certified Administrative Medical Assistant
- **Pre-Professional Healthcare Tracks**
  - Physical and Occupational Therapy; Physician Assistant, Medical School; Dental School; Optometry; Nursing; Public Health; Healthcare Administration; Healthcare Logistics; Health Information Technology
- **(Un)Common courses for jobs/certifications and Pre-Professionals**
  - Medical terminology, Healthcare Ethics & Law, Healthcare Communication, Healthcare Information Systems, Biostatistics, Epidemiology and Public Health, Pathophysiology, Basic Pharmacology, Spanish for Health Professionals, Neuro-Anatomy, Polysomnography





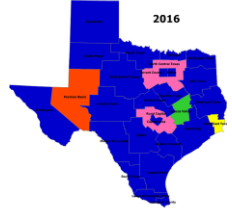
# Advising, Advising, & MORE Advising



- **Advising is CRITICAL**
  - **Certificate and Professional disciplines are VERY prescriptive and specific**
  - **Regulation: State & Federal**
    - **Administrative law**
  - **Individual Schools are also VERY prescriptive and specific**
    - **Minimum requirements**
      - Independent Programmatic Accreditation
      - Independent Programmatic Credentialing
    - **Recommended/Reputation requirements**
- **Advising NEVER stops**

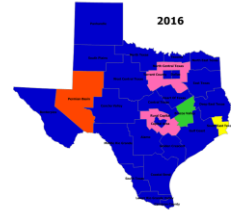
# Graduate-Level Dual Credit

- **Critical Concept**
  - **Work with individual professional schools**
    - Curriculum
    - Faculty
    - Instruction
- **Current exploration in dual undergraduate-graduate credit**
  - Physical Therapy, Occupational Therapy, Optometry
  - 90 sem hrs = “pre-admission”
    - Complete prerequisites
    - Advanced-start professional curriculum



# Certified Rhythm Analysis Technician

- **1 Course, 1 Certificate, 1 Entry-level Career**

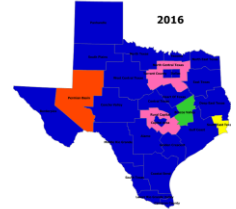


- **Cardiovascular Credentialing International**
  - Credentialing professionals in the field of Cardiovascular Technology since 1968
  - Certified Rhythm Analysis Technician I
  - Telemetry monitor technician
    - \$25/yr - \$55K/yr
- **HSCI 3305 Basic Cardiac Rhythm Interpretation**
  - Cardiac anatomy & physiology
  - Cardiac electrophysiology
  - Rhythm strip analysis
  - Treatment algorithms
  - Regulatory compliance

# Administrative Health Science Certification Programs



- **National Health-care Association**



- **Certified**

- Billing and Coding Specialist
- Medical Administrative Assistant
- Electronic Health Records Specialist

- **Similar course clusters**

- Health Sciences I & II (Biology, Chemistry, Anatomy & Physiology)\*
- *Medical Terminology, Healthcare Ethics & Law, Healthcare Communication*

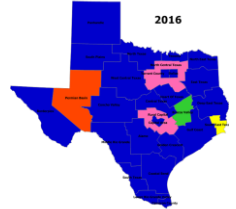
- **Certification-specific courses**

- Medical Billing and Coding, Administrative Medical Assisting, Healthcare Information Systems, Basic Pharmacology, Electronic Health Records

# Pre-Occupational/Physical Therapy Track\*

\*Because admission requirements, prerequisites and program components differ among post-baccalaureate programs & Schools, details of the curriculum may vary depending on the chosen graduate program.

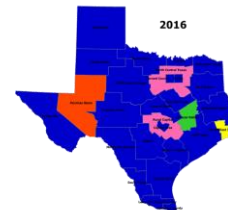
- **Biological Sciences with Lab (8)**
  - **A&P I (4), A&P II (4)**
  - *Immunology, Genetics recommended*
- **Chemistry with Lab (8)**
  - Gen/Inorganic I (4), Gen/Inorganic II (4)
  - **Organic, Biochem recommended**
- **Physics with Lab (8)**
  - Phys I (4), Phys II (4)
- **Psychology (3)**
  - **General Psych (3), Abnl Psych, (3) Life Span/Dev Psych (3)**
- **Mathematics (3-6)**
  - **Stats (3), Algebra (3)**
  - **Biostats recommended**
- **English (6)**
  - **Comp I (3), Comp II/other (3)**
- **Recommended Health Sciences**
  - **Medical Terminology, Healthcare Ethics & Law, Pathophysiology**
  - **Practical Experience (e.g. technical health sciences such as **CRAT1**)**



# Pre-Optometry Therapy Track\*

*\*Because admission requirements, prerequisites and program components differ among post-baccalaureate programs & Schools, details of the curriculum may vary depending on the chosen graduate program.*

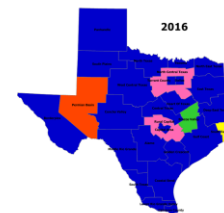
- **Biological Sciences with Lab (8)**
  - **A&P I (4), A&P II (4)**
  - *Molecular, Immunology, Genetics recommended*
- **Chemistry with Lab (16)**
  - Gen/Inorganic I (4), Gen/Inorganic II (4), **Organic I (4), Organic II (4)**
  - *Biochem recommended*
- **Physics with Lab (8)**
  - Phys I (4), Phys II (4)
- **Psychology (3-6)**
  - **General Psych (3), Abnl Psych, (3) Life Span/Dev Psych (3)**
- **Mathematics (6)**
  - Trig (3), Calc (3)
  - **Algebra, Stats, Biostats recommended/pre-requisite**
- **English (6)**
  - **Comp I (3), Comp II/other (3)**
- **Recommended Health Sciences**
  - **Medical Terminology, Healthcare Ethics & Law, Pathophysiology**
  - **Practical Experience (e.g. technical health sciences such as **CRAT1**)**



# Pre-Physician's Assistant Track\*

\*Because admission requirements, prerequisites and program components differ among post-baccalaureate programs & Schools, details of the curriculum may vary depending on the chosen graduate program.

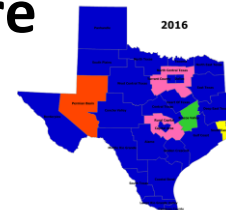
- **Biological Sciences with Lab (16)**
  - BIO (4), **A&P** (8), Micro (4)
  - *Immunology and Genetics strongly recommended*
- **Chemistry with Lab (16)**
  - Gen/Inorganic (8), **Organic** (4-8)
  - *Biochem strongly recommended*
- **Psychology (9)**
  - **General Psych** (3), **Abnl Psych** (3) **Life Span/Dev Psych** (3)
- **Mathematics - (3 - 6)**
  - **Stats** (3), **Algebra** (3)
  - **Biostats** strongly recommended
- **English (6)**
  - **Comp I** (3), **Comp II/other** (3)
- **Recommended Health Sciences**
  - **Medical Terminology, Healthcare Ethics & Law, Pathophysiology**
  - **Practical Experience (e.g. technical health sciences such as CRAT1)**



# Other Pre-Professional Programs

- **Similar Pre-Professional Programs in Health Science/Care**

- Administration (Healthcare Administration)
- Chiropractic Care
- Clinical Laboratory Science
- Dental & Dental Hygiene Care
- Medicine & Medical-Biologic Sciences
- Neuroscience (Somnography, Neuro-anatomy)
- Nursing
- Occupational Therapy
- Optometry
- Pharmacy
- Physical Therapy
- Physician Assistant
- Public Health
- Radiation Science
- Respiratory Care
- Zoology (Veterinary Medicine)



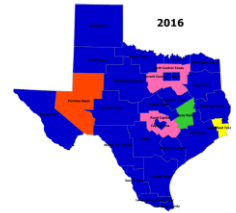


# Anatomy of a Health Science Course: CRAT I

- **HSCI 3305 Basic Cardiac Rhythm Interpretation**

- **Cardiovascular Credentialing International**

- Blueprint: Cardiac A&P, electrophysiology, rhythm strips, treatment, and regulatory compliance
- Programmatic Requirements (accredited HS program)
- Credentialing Requirements (certification exam)



- **UIW Online**

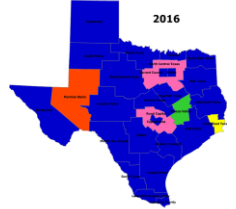
- Regionally accredited (SACS COC)
- Programmatically accredited/certified
- Multiple DoD-contract & transfer programs

- **Instructional Options**

- Blackboard – 6, 8-week terms per year, asynchronous
- Brainstorm – Competency-based Learning Management System
  - Advanced placement testing
  - Flexible, student-controlled pacing
  - 12, 1 – 2 month terms per year, multi-synchronous

# Conclusion

- Health Science/Care is in-demand and rapidly growing
- Biology: largest prerequisite area for HS/C programs
- Academic sharing via the College Consortium provides cost-effective opportunities in add in-demand HS/C curriculum to Biology programs otherwise not feasible
  - *Advising is CRITICAL*
  - *Quality is independently validated via programmatic accreditation required of the administrative law that protects public health*



## Contact Information:

Dr. Mitch Seal, Dean, School of Online Learning (UIW Online)

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# More about the College Consortium

## Is your college a good fit for the College Consortium?

- ✓ Do you want to offer more programs, majors, or skill-based courses (like Allied Health)?
- ✓ Do you recommend students take classes at other colleges (summer school)?
- ✓ Do you have students who need to take classes remotely (life event, study abroad)?
- ✓ Do you want more online courses but don't want to make an upfront investment?
- ✓ Do you need more options for degree completion (pre-reqs)?
- ✓ Do you have online programs you want to offer to generate more enrollments/revenue?

If Yes to any, contact us to learn more and become a Charter Member:

Nathan Green – [Nathan@collegeconsortium.org](mailto:Nathan@collegeconsortium.org), C: 917.309.1877

Rob Manzer – [Rob@collegeconsortium.org](mailto:Rob@collegeconsortium.org), C: 512.492.2550

# Next Webinar: Nov 2<sup>nd</sup> at 1:00PM CST



## ***Secrets to Success in Online Learning***

This webinar of a panel of experts and cover:

1. Fundamentals of online learning (defining terms like asynchronous)
2. Key concepts in instructional design for online curriculum
3. Best practices in online pedagogy from the classroom

Panelists will include:

1. Rob Manzer (Ph.D.), Former Provost at AIU and CAO of College Consortium
2. Alex Herron (Ed.D.), Online Center Dean at Concordia Texas
3. Rochelle Green (Ed.D), Former Dean of Fischler School at Nova Southeastern
4. Arthur Green (JD), Adjunct Online Faculty at Nova Southeastern

You can register for the Webinar at <http://bit.ly/2cSG1mc>